ICCRAMS

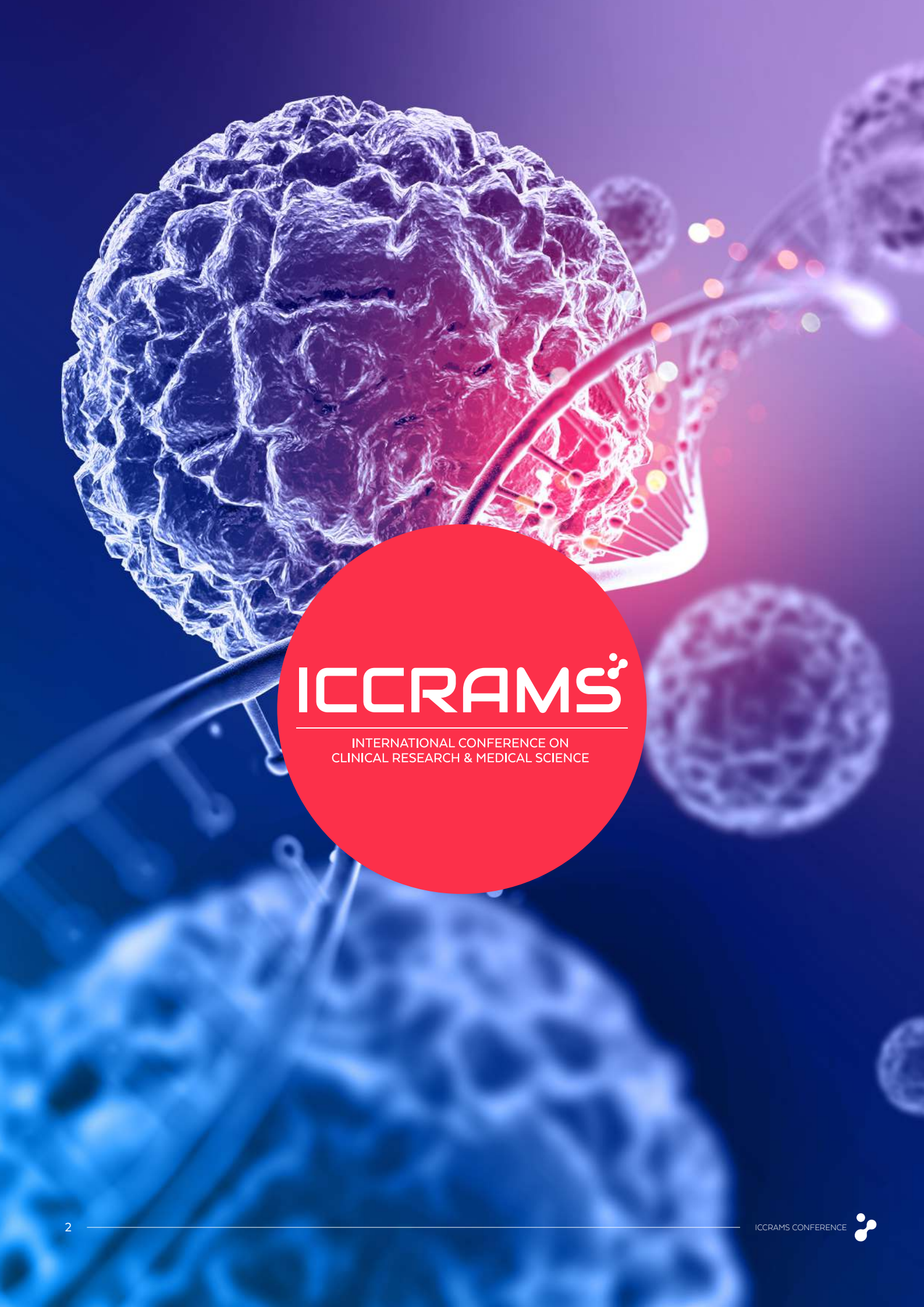
INTERNATIONAL CONFERENCE ON
CLINICAL RESEARCH & MEDICAL SCIENCE

18-20 SEPTEMBER 2019

Venue: **Campus of TIU**
Erbil International Hotel

CONFERENCE BOOK

2019


ICCRAMS
INTERNATIONAL CONFERENCE ON
CLINICAL RESEARCH & MEDICAL SCIENCE

WELCOME TO THE **ICCRAMS 2019** CONFERENCE

Organized by

Tishk International University
Kurdistan Board of Medical Specialties
University of Zakho College of Medicine
Hawler Medical University
National Institute of Genetic Engineering and Biotechnology
Hame University of Applied Sciences

ICCRAMS

INTERNATIONAL CONFERENCE ON
CLINICAL RESEARCH & MEDICAL SCIENCE

ishik.edu.iq/conf/iccrams/

OPENING REMARKS:

A special and unique transition is occurring within Kurdistan of Iraq, the ancestral home of the ethnic Kurds. Security and regional stability has initiated a new phase of innovative developmental changes. Improvements to infrastructure, Academic Institutions, Healthcare and other sectors of society characterize this change, the consequence of a significant demand for renovation and modernization. The result, an exceptional opportunity for the investment into and expansion of the integrant aspects of this society and, in particular, the field of Medicine and Clinical practice. At this very moment, a sudden and extra-ordinary transformation within healthcare is in progress, precipitated and driven by huge investments in private healthcare, permitting the distribution of the most advanced medical technologies to our communities and providing new treatment options and hope to those in need. For years, the healthcare industry was in need of critical restoration and adjustment. In prudent recognition of both the demand and need, the establishment of companies numbering in the thousands has followed. These requirements, which include the provision and distribution of medical supplies, clinical appliances and laboratory apparatus, has thus far culminated in the launch of hundreds of modern hospitals, laboratories, medical research centers and academic institutes. Gradually and consistently, from rudimentary origins, these numerous advancements in medicine and healthcare are forging the framework for a flourishing and exemplary healthcare industry and perhaps most importantly, one with tremendous potential to improve the quality of life of tens of thousands and save countless individuals from premature passing. With the infrastructure expansion and consolidation of the healthcare industry and growing pressure for the latest medical technology and practices, pioneering research is an emerging necessity to maintain the quality, sustainability and continuing proliferation of this societal sector. The improvement of medical services not only lies with technology but with regular and continuous audit of practical efficacy utilizing empirical research through monitoring, validating and accrediting medical services within the community. In strong recognition of the fundamental function that this research constitutes to the attainment of our ambition, we proposed the ICCRAMS (International Conference on Clinical Research and Medical Sciences) (ICCRAMS).

ICCRAMS as an initiative conference to accommodate all clinical doctors, practitioners, medical researchers, and clinical scientists together to build a robust bridge between science and medicine, clinics and research, patients and doctors, community and medical families. ICCRAMS provides a platform for the researchers, academicians, doctors and clinical practitioners to share their case reports, articles, ideas and publications. The partners of the conference throughout organizing ICCRAMS tries to take the privilege in accommodating the top researchers of the region. This is in addition to welcoming the international excellences in order to bridge the exchange of science and medical research between the master minds of the fields. Despite this, our vision takes us beyond educational services and our desire to assist and accommodate the objectives of our community has set our sights into the realm of scientific research, a critical element in the progression of medical technology, theory and practice. ICCRAMS will be the first huge medical event that gathers international and local medical practitioners, clinic researchers, and medical scientists in the country. Translational and innovative medicine with scientific approach is the main theme of the conference.

Organizing Committee of ICCRAMS 2019

ORGANIZING COMMITTEE

The Organizing Committee of The International Conference on Clinical Research and Medical Science (ICCRAMS 2019) is composed of distinguished academics who are experts in their fields. The Organizing Committee is responsible for nominating and vetting Keynote and Featured Speakers; developing the con¬ference program, including workshops, panels, targeted sessions; undertaking event outreach and promotion; recommending and attracting future Organizing Committee members; working with Tishk International University to select PhD students and early career academics for Tishk International University-funded grants and scholarships for teaching profession as careers; and reviewing abstracts submitted to the conference.

Conference Honorary Chairs:
Dr. Idris Hadi Salh – President of Tishk International University
Asst. Prof. Dr. Lazgin A. Jamil – President of University of Zakho
Asst. Prof. Dr. Saleem Saeed Qader – President of Kurdistan Board of Medical Specialties
Asst. Prof. Dr. Dara Omer Miran – President of Hawler Medical University
Professor Mostafa Motallebi – NIGEB Director General
Dr. Pertti Puusaari – Rector and CEO of Häme University of Applied Sciences

Conference Chair:
Asst. Prof. Dr. Karzan A. Mohammad – Tishk International University

Conference Co-Chairs:
Asst. Prof. Dr. Nawfal R. Hussein – University of Zakho
Asst. Prof. Dr. Abdullah F. Ahmed – Kurdistan Board of Medical Specialties
Asst. Prof. Dr. Hamdia Mirkhan Ahmed – Hawler Medical University
Prof. Massoud Houshmand – National Institute of Genetic Engineering and Biotechnology
Maaret Viskari, Hame University of Applied Sciences

Conference Scientific Committee:
Professor Dr. Hiwa Banna – Tishk International University
Professor Dr. Kafia Mawlood – Tishk International University
Assistant Professor Dr. Abbas Salehi – Salahaddin University
Professor Mohamma Hossein Sanati – National Institute of Genetic Engineering and Biotechnology
Professor Ali Hatef Salmanian – National Institute of Genetic Engineering and Biotechnology
Professor Mustafa Motallibi - National Institute of Genetic Engineering and Biotechnology
Dr. Ahmed Ibrahim – University of Zakho
Dr. Haval Mohammed – University of Zakho
Dr. Ibrahim Naqid – University of Zakho
Dr. Sherzad Ali Ismael - Kurdistan Board of Medical Specialties
Dr. Muayad Abdulla Wahab – Kurdistan Board of Medical Specialties
Dr. Khursheed Khruatani - Kurdistan Board of Medical Specialties
Dr. Rebaz Taher Omer Te. – Kurdistan Board of Medical Specialties
Dr. Sewgil Saadudeen Anwer - Hawler Medical University
Dr. Salah Tofik Jalal - Hawler Medical University

Conference Organizing Committee:
Dr. Orhan Tug – Tishk International University
Dr. Ibrahim Yaseen - Tishk International University
Dr. Rebuar Fadhil - Tishk International University
Dr. Muath Sheet – Tishk International University
Dr. Sherzad Ali Ismael - Kurdistan Board of Medical Specialties
Dr. Maaroof Tahseen Hasan- Kurdistan Board of Medical Specialties
Dr. Dler Qader Omer - Hawler Medical University
Dr. Karwan Amin - Hawler Medical University
Dr. Bresk Gerdi – University of Zakho
Dr. Basheer Merik – University of Zakho
Dr. Kasra Esfehani - National Institute of Genetic Engineering and Biotechnology
Kajaleh Mohammadi – National Institute of Genetic Engineering and Biotechnology
Professor Massoud Houshmand - National Institute of Genetic Engineering and Biotechnology
Maaret Viskari, Hame University of Applied Sciences
Mr. Omer Akar - Media Office Manager

Graphic designer
& Brand Maker

Muhammed Sherwan
Online Portfolio : www.behance.net/muhammedsherwan

CONFERENCE GUIDE

Name Badges:
Please wear your Name Badge at all times so our volunteers can be certain you have registered for the conference.

Certificates
Certificates for Presenters will be presented immediately following their sessions.
Certificates for Session Chairs and Organizing Committee members will be delivered during the closing ceremony on the 19th September.
Certificates for the Participants can be collected from the registration at the end of the day's activities on 20th September.

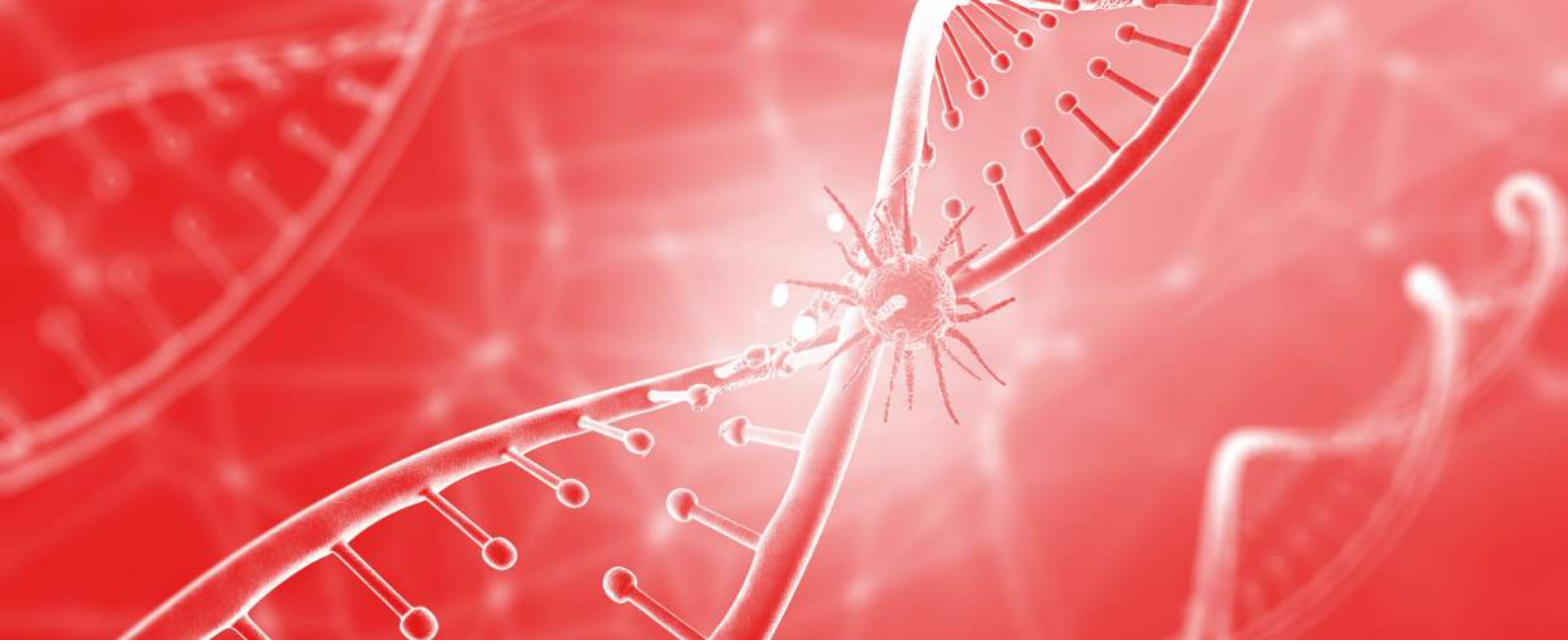
Lunch
Erbil International Hotel will be providing lunch free of charge on 19th September for all the registered participants and speakers.

Official Lunch 19th September: 1:30 PM-2:30 PM in Erbil International Hotel

Lunch on the 20th September will be provided by Tishk International University in the Education Building Dining Hall. Please remember to bring your name badge with you as this will serve as your lunch ticket.

Lunch 20th September: 12:00 PM-1:45 PM in TIU

Tea and Coffee
There will also be a break in the morning and afternoon of each day for tea and coffee.



PRESENTATION GUIDE

Conference Abstracts

All conference abstracts are available as a hardcopy of an abstract book.

Oral & Workshop Presentations

Oral Presentation Sessions will run from 11:00 AM on Friday, 20th September. The time in the sessions is to be divided equally between presentations. We reccommend that an Oral Presentation should last 10-15 minutes to include time for question and answers but should last no longer than 15 minutes. Any remaining session time may be used for additional discussion.

Equipment

All rooms will be equipped with a computer and IWB pre-installed with PowerPoint and connected to an LCD projector. We advise you to use the computer provided by plugging in your USB flash drive. We recommend that you bring two copies of your presentation in case one fails and suggest sending yourself the presentation by email as a third and final precaution.

Session Chairs

Session Chairs are asked to introduce themselves and other speakers (briefly) using the provided printouts of speaker bios, hand out the provided presentation certificates at the end of the session, ensure that the session begins and ends on time, and that the time is divided fairly between the presentations. Each presenter should have no more than 15 minutes in which to present his or her paper and respond to any questions. The Session Chair is asked to assume this timekeeping role.

Please follow the order in the program, and if for any reason a presenter fails to show up, please keep to the original time slots as delegates use the program to plan their attendance.

Certificates

All presenters will receive a certificate of presentation from their Session Chair or a member of staff at the end of their session.

A Polite Request to All Participants

Participants are requested to arrive in a timely fashion for all presentations, whether to their own or to those of other presenters. Presenters are reminded that the time slots should be divided fairly and equally between the number of presentations, and that presentations should not overrun. Participants should refrain from talking amongst themselves and ensure that mobile phones are switched off or set to silent mode during presenta¬-tions.

MISSION AND VISION:

ICCRAMS represents the 1st International Conference on Clinical Research and Medical Sciences targeting researchers, leading academic scientists, and research scholars to share and exchange their research data and experiences on all aspects of Clinical and Biomedical Sciences. Also, this international event provides an outstanding interdisciplinary platform for practitioners, researchers, and educators to present and share the most recent trends, innovations, and concerns as well as practical challenges to adopt solutions in the area of Clinical and Biomedical Sciences.

AIMS OF THE CONFERENCE:

1. Introduce the latest findings in clinical research
2. Exhibit recent medical advancements and innovations
3. Present global perspectives on healthcare with a diverse group of practitioners
4. Discuss possible solutions for healthcare inequality in developing nations
5. Initiate media campaigns for medical awareness
6. Increase public health education in the community

SPECIAL THANKS TO THE SESSION CHAIRS FOR ICCRAMS 2019

The ICCRAMS 2019 Organizing Committee would like to recognize the Session Chairs for all their hard work in coordinating his/her respective Concurrent Session. We know that it is difficult to stop Academi¬cians presenting their research. Thank you for ensuring that the sessions ran on time and smoothly.

SESSION CHAIRS:

Professor Dr. Saed Nazim - Kurdistan Board of Medical Specialties

Professor Dr. Ali Al-Zubedi - Kurdistan Board of Medical Specialties

Assistant Professor Dr. Las Hawezy - Kurdistan Board of Medical Specialties

Assistant Professor Dr. Sinan Batrus - Kurdistan Board of Medical Specialties

Assistant Professor Khurshid Khrwatani - Kurdistan Board of Medical Specialties

Dr. Sahand Ismail – Kurdistan Board of Medical Specialties

Dr. Fikry A. Qadir – Kurdistan Board of Medical Specialties

Prof. Dr. Saeed Nadhim – Kurdistan Board of Medical Specialties

Assistant Prof. Dr. Sinan Petrus – Kurdistan Board of Medical Specialties

Dr. Sahand Ismael - Kurdistan Board of Medical Specialties

Dr. Basheer Abdi – University of Zakho

Dr. Bashar Muhammed – University of Zakho

Dr. Haval Salih – University of Zakho

Dr. Ferhad Ahmed – University of Zakho

Dr. Shakir Abdulrahman - University of Zakho

Dr. Ibrahim Yaseen – Tishk International University

Dr. Hishyar Najeeb – University of Duhok

Dr. Abbas Burhan Salihi – Salahaddin University and Tishk International University

Dr. Esra Tariq Anwer – Tishk International University

Dr. Amani Layth Hameed – Hawler Medical University

Dr. Kazhan Ibrahim Mahmood – Hawler Medical University

Dr. Karwan M.Amen - Hawler Medical University

Dr. Hedy A. Chawshin – Salahaddin University

Dr. Shukir Saleem Hasan - Hawler Medical University

Dr. Abdulkarim Y. Karim - Salahaddin University

Dr. Zana R. Majeed - Salahaddin University

Dr. Zeerak Faqe Ahmed - Salahaddin University

Dr. Himdad Hawez – Salahaddin University

Dr. Sardar Karash - Salahaddin University

KEYNOTE SPEAKERS

Professor Dlawer Ala'Aldeen is the Founding President of the Middle East Research Institute, former Minister of Higher Education and Scientific Research in Kurdistan Regional Government (2009-2012), and Professor of Medicine in Nottingham University, UK.

Dr. Timur Smirnov, M.D. is a radiologist, who works as partner with Clever Scientific, Sectra Education and Medical Training Department as a Market Area Manager, responsible for several markets in Eastern Europe (Bulgaria, Czech Republic, Poland, Romania) and some Middle East Countries, such as Iraq, Lebanon, Egypt, and other regions like Pakistan and the Maldives Republic. Graduated from Pavlov First Saint-Petersburg State Medical University (General Medicine), he continued his education as a radiologist in S.M. Kirov Military Medical Academy (Saint-Petersburg, Russia). His main focus is in CT and MRI modalities (MSK and Neurovisualisation as well as radiology anatomy. He is an author of several scientific articles and co-author of guidelines on MR-visualization of stroke and MR-mammography.

Prof. Dr. Alpay Turan Sezgin, MD, graduated Erciyes University in Turkey and later specialized in Cardiology at Inonu University. Currently he is serving as a professor in the Cardiology Department at Acibadem University in Adana, Turkey. Additionally, he serves as the Chief of Adana Cardiology Department. Prof. Dr. Sezgin has worked as an interventional cardiologist since 2000. Primary PTCA, acute ischemic stroke, percutaneous mitral balloon valvuloplasty, and TAVI are his main areas of expertise. Prof. Dr. Sezgin has been performing coronary angiography by radial access since 2002. He is certified and has had training for TAVI in Switzerland in 201, and since then he has performed and participated 24 TAVI cases. Additionally, he has performed intra-arterial therapy in patients with acute ischemic stroke since 2010.

KEYNOTE SPEAKERS

Professor Malcolm Richardson (Ph.D., FRSB, FINstSSE, FRCPath, FECMM Academy) is the Director of the Mycology Reference Centre, Manchester University NHS Foundation Trust at Wythenshawe Hospital and an honorary Professor of Medical Mycology at the University of Manchester. In 2017 the Mycology Reference Centre became the first European Confederation of Medical Mycology Centre of Excellence (Diamond Status). Malcolm Richardson is an elected Fellow of the Royal College of Pathologists and the Royal Society of Biology. His clinical and laboratory investigations have focused on the pathogenicity, diagnosis, and epidemiology of superficial and systemic fungal infections. More recently he has applied his diagnostic experience to investigating the mycobiome of indoor environments using next-generation sequencing.

Dr. Amanj Saeed, MB.CH.B, MD, MSc, PhD is Advisor to the Minister of Higher Education and Scientific Research of the Kurdistan Regional Government. He services as chairman of Quality Assurance and National University Ranking Boards. He is actively involved in Higher Education initiatives, Human Capacity Development Program, National Research Council, Pedagogical Reform, and Medical Education. He has previously served as the higher education advisor to the office of KRG prime minister and has worked on Higher Education Reform projects, Medical Education, and Human Capacity Development. He was also lecturer at the University of Sulaimani, School of Medicine, Department of Microbiology and infectious diseases. He holds a PhD in Clinical Microbiology and Infectious Diseases and MSc in Clinical Microbiology from the University of Nottingham, UK. He obtained his bachelor's degree in Medicine and Surgery, and Bachelor's Degree in law from the University of Sulaimani. Dr. Saeed is focused in his research on developing a model to study liver fibrosis in response to viral Hepatitis.

Dr. Sherzad Ali Ismael, Iraqi Board-certified assistant professor of Community Medicine' and an associate editor of Kurdistan Board of Medical Specialties. Published more than 20 articles in national and international journals on the subjects related to community health and disease prevention. His research and medical practice interests focus on metabolic syndrome, diabetes mellitus, and obesity.

KEYNOTE SPEAKERS

Dr. Jaswanth Albert, M.Pharm., Ph.D., is a pharmacologist having 23 years of teaching and research experience. He was awarded the International Scholar of the Twentieth Century by the American Organization of Intellectuals, Inc. USA. He served as Director T&P cell and Principal Investigator and coordinator for funded projects under Experimental Pharmacology, Entrepreneurship Management cell and IBOY Satellite Project, USA. He has organized many workshops and seminars and has also chaired many scientific sessions in international conferences. He has guided 9 candidates for their Ph.D., 34 research projects at UG and PG levels. He has served as a referee for a few referred journals and reviewed articles in European Journal of General Medicine, African Journal of Pharmacy and Pharmacology, and Journal of Environmental Science and Health. He has published 59 research publications in national and international journals, with a Research Gate score of 20.34 (researchgate.net) with more than 596 citations in indexed journals and completed more than 100 consultancy projects in pharmacology.

Dr. Seyed Moayed Alavian is a professor of medicine and hepatologist, he established the first hepatitis clinic in 1995, at the Iranian Blood Transfusion Service in Tehran, and he is one of the founders of the Iranian Charity for Liver Support in Tehran, established in 1995. He has been the associate editor of the Journal of Clinical Virology from 2004, and an advisor and consultant on national program projects for the control of hepatitis in Iran. He has been a member of the National Committee for Hepatitis in the Iranian Ministry of Health and Medical Education since 1995. Alavian is an experienced researcher and hepatologist who has been actively involved in various national multicenter clinical trials and basic scientific projects related to viral hepatitis over the past 19 years. He has authored/co-authored over 320 articles in both local and international journals. He was the principal investigator in numerous clinical trials related to the management and treatment of hepatitis C and B patients. His main interests are; health policy, epidemiological aspects of viral hepatitis, and methods of integrating new protocols for the control of these infections. He is also interested in clinical trials of emerging medications for hepatitis B virus and hepatitis C virus infections, along with the treatment of viral hepatitis in particular diseases, including thalassemia and hemophilia. He is the founder and director of the Middle East Liver Disease (MELD) Centers which were established in Iran, in 2012, and the program has expanded throughout the entire region with the collaboration of scientists in both Middle East and Middle Asian countries.

KEYNOTE SPEAKERS

Dr. Rawa Araim graduated from medical school in Mosul Iraq in 1987 and did her fellowship in radiology in Baghdad. In 1996, Dr. Araim left Iraq for the US and attended New York College of Osteopathic Medicine in New York state. Dr. Araim is American Board certified in Physical Medicine and Rehabilitation. She also sub-specialized in Brain Injury Medicine and Spasticity at the University of Texas, Southwestern Dallas. Dr. Araim is a Fellow of the American Academy of Physical Medicine and Rehabilitation, Medical Director of Inpatient Rehabilitation, and a Clinical Assisted Professor in the Medical Sciences program at Indiana University School of Medicine.

Dr. Paula Hakala has a PhD (Sci.) from School of Public Health, University of Tampere, Faculty of Education. Principal Lecturer in master and bachelor level health care education, Häme University of Applied Sciences (HAMK), School of Wellbeing. Focus areas are management in health care, the development of health care and the quality management.

WORKSHOPS

On the second day of the conference at Tishk International University in the Education Building there will be five workshops to choose from:

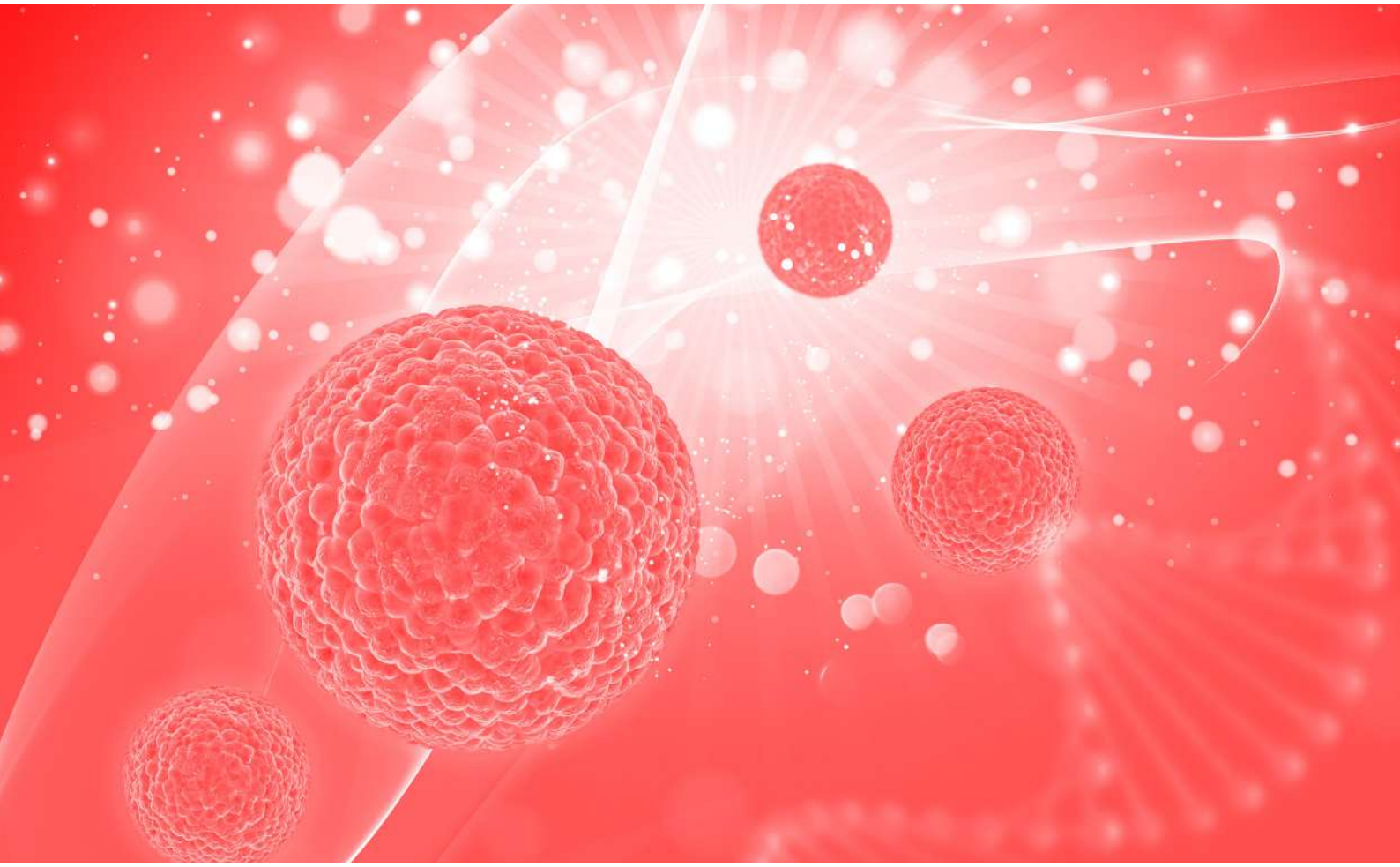
1. Pediatric Nursing in Emergency and ICU Cases – Room 312
Brittany Boggs, RN - USA
Jill Sadler, RN - USA

2. Biotechnology and the Diagnoses of Genetic Diseases – Hall 302
Professor Dr. Massoud Houshmand - Iran
Professor Dr. Hazha Jamal Hidayat - Kurdistan

3. Clinical Pharmacology and Drug Discovery – Room 305
Dr. Subasini Uthirapathy – India
Dr. Jaswanth Albert – India

4. Community Health, Obesity, and Dieting – Room 215
Lauren Martin, RN – USA
Dr. Karwan M.Amen – Kurdistan

5. Clever Scientific Presents: Sectra – Room 303



DAY 1 SCHEDULE

Erbil International Hotel
9/19/2019

8:45 AM	Registration	
9:30 AM	Welcome to ICCRAMS - Host	
9:45 AM	Iraqi National Anthem	
9:50 AM	Kurdish National Anthem	
9:55 AM	Chair of Conference Speech	
10:00 AM	TIU President Speech	
10:05 AM	Host introduces Minister of Higher Education	
10:10 AM	Protocol Speech	
10:15 AM	KBMS President speech	
10:20 AM	Zakho University President Speech	
10:25 AM	HMU President Speech	
10:30 AM	NIGEB President Speech	
	Extra time for transitions between speakers	
10:45 AM	Keynote Speaker: Dr. Dlawer Ala'Aldeen - 30 minute speech, up to 10 minutes Q & A, present plaque	Session chair: Dr. Ibrahim Yaseen - TIU
11:30 AM	**Clever Scientific Speaker: Dr. Timur Smirnov**	
11:45 AM	**Tea/coffee break**	
12:00 PM	Keynote Speaker: Professor Dr. Alpay - 30 minute speech, up to 10 minutes Q & A, present plaque	Session Chair: Asst. Prof. Dr. Las Hawezy - KBMS
12:45 PM	Keynote Speaker: Professor Dr. Malcolm Richardson - 30 minute speech, up to 10 minutes Q & A, present plaque	Session Chair: Dr. Hishyar Najeeb - Duhok University
1:30 PM	**Lunch**	
2:30 PM	Keynote Speaker: Dr. Amanj Saeed- 30 minute speech, up to 10 minutes Q & A, present plaque	Session Chair: Dr. Abbas Burhan - Salahaddin/TIU
3:15 PM	Keynote Speaker: Dr. Sherzad Ali - 30 minute speech, up to 10 minutes Q & A, present plaque	Session Chairs: Dr. Brisk Rashad - UoZ
4:00 PM	**Tea/coffee break**	
4:15 PM	Keynote Speaker: Dr. Jaswanth Albert - 30 minute speech, up to 10 minutes Q & A, present plaque	Session Chair: Dr. Esra Tariq Anwer - TIU
5:00 PM	Keynote Speaker: Dr. Seyed Moayed Alavian - 30 minute speech, up to 10 minutes Q & A, present plaque	Session Chair: Dr. Haval Salih - UoZ
5:45 PM	Keynote Speaker: Dr. Rawa Araim - 30 minute speech, up to 10 minutes Q & A, present plaque	Session Chair: Dr. Farhad Ahmed - UoZ
6:30 PM **6:45 PM**	Closing Session - Certificates for committees and chairs	

CONCURRENT SESSIONS PROGRAM

MED - Medical
BS - Biomedical Sciences
PH - Pharmacy
NCH - Nursing and Community Health
DEN - Dentistry

Medical Sessions: Hall 312 Friday, 20-9-2019

Sessions Chair: Asst. Prof. Dr. Las Hawezy

Time	Code	Presenter	Title
11:15 AM	MED01	Bahrooz Azeez M. Shareef	Outcomes of cochlear implantation in children in Erbil
11:30AM	MED06	Ferhad Mohammed Rasheed Ahmed	Attributes of Patients with Perforated Duodenal Ulcer in Duhok City
11:45 AM	MED24	Hez Nihad Mohammed Fadhil	Serum Albumin in Colorectal Cancer
2:00 PM	MED22	Professor Jaafar Mahboba	The Effect of Timing of Dexamethasone Administration on Its Efficacy as a Prophylactic Antiemetic for Postoperative Nausea and Vomiting in Tonsillectomy surgery
2:15 PM	MED28	Dr. Saywan Haias Saeed	Outcome and Complications of Renal Transplantation in Pediatric Age Groups

Medical Sessions: Hall 312 Friday, 20-9-2019

Session Chair: Prof. Dr. Saeed Nadhim

Time	Code	Presenter	Title
2:30 PM	MED29	Dr. Fatima Kamal Khalid	Maternal and fetal outcome of abruptio placenta
2:45 PM	MED07	Ferhad Mohammed Rasheed Ahmed	Solid pseudopapillary tumor of the pancreas in a 17-year-old girl
3:00 PM	MED09	Dr. Hishyar A. Najeeb	DNA damage among health workers in radiology departments of Duhok hospitals, Kurdistan Region-Iraq
3:15 PM	MED34	Husen A. Husen	Capsular retraction in breast cancer liver metastasis, prevalence and feature analysis detected by MDCT

Medical Sessions: Hall 312 Friday, 20-9-2019

Session Chair: Ass. Prof. Dr. Sinan Petrus

Time	Code	Presenter	Title
3:45 PM	MED02	Dr. Basheer Ali Abdi	Lymphopenia in systemic lupus erythematosus as an indicator of disease activity in Duhok Governorate
4:00 PM	MED12	Dr. Naseh Pahlavani	Effects of pyridoxine supplementation on the severity, frequency, and duration of migraine attacks in migraine patients with aura: A double-blind randomized clinical trial study in Iran
4:15 PM	MED15	Fatemeh Ebrahimi	The effect of saffron (Crocus sativus L.) supplementation on blood pressure, and renal and liver function in patients with type 2 diabetes mellitus: A double-blinded, randomized clinical trial
4:30 PM	MED27	Sangar Abubakir Ahmed	Correlation of age and lactation period with idiopathic granulomatous mastitis

Medical Sessions: Hall 312 Friday, 20-9-2019

Session Chair: Dr. Sahand Ismael

Time	Code	Presenter	Title
4:45 PM	MED04	Dr. Salam Zangana	Role of magnesium deficiency in bronchial asthma
5:00 PM	MED30	Adib Friad Hama Sur	The Prevalence of Gall Stone in Patients with Thyroid Dysfunction

Medical Sessions: Hall 305 Friday, 20-9-2019

Session Chair: Dr. Sahand Ismael

Time	Code	Presenter	Title
3:45 PM	MED03	Dr. Ayoob Ali Mohammed	Diarrhea among children below 5 years of age admitted to Al- Salam teaching hospital in Mosul
4:00 PM	MED26	Rebaz Omar Muhammed	Patient satisfaction after appendectomy
4:15 PM	MED18	Tayeb Sabir Kareem	Jejunojejunal Intussusception following jejunostomy closure a case report

CONCURRENT SESSIONS PROGRAM

MED - Medical
BS - Biomedical Sciences
PH - Pharmacy
NCH - Nursing and Community Health
DEN - Dentistry

Biomedical Science Sessions: Hall 303 Friday, 20-9-2019

Session Chair: Dr. Fikry A. Qadir

Time	Code	Presenter	Title
11:15 AM	BS01	Tarik Abdulgadir Abdal	Influence of ethanol extract of aloe vera on liver and kidney parameters in rats exposed to hydrogen peroxide
11:30 AM	BS05	Amira Saeed Khalil	High Risk Human Papilloma Virus Genotypes in Kurdistan Region In patients with Vaginal Discharge
11:45 AM	BS06	Dr. Ibrahim A. Naqid	Serological Study of IgG and IgM Antibodies to Cytomegalovirus and Toxoplasma Infections in Pregnant Women in Zakho City, Kurdistan Region, Iraq

Biomedical Science Sessions: Hall 303 Friday, 20-9-2019

Session Chair: Dr. Abdulkarim Y. Karim

Time	Code	Presenter	Title
2:00 PM	BS07	Zana SM Saleem	The prevalence of HBV infection in renal transplant recipients and the impact of infection on graft survival
2:15 PM	BS13	Ilham Khalid Ibrahim	Assessment of Radiation Dose in Routine X- Ray examinations of Skull, Chest and Abdomen in Children in Teaching hospitals, Rapreen, Rizgary and Hawler in Erbil city
2:30 PM	BS14	Naser Ajami	Phenylketonuria Mutations in Iran: Updated Listing of Mutation Map

Biomedical Science Sessions: Hall 303 Friday, 20-9-2019

Session Chair: Dr. Hedy A. Chawshin

Time	Code	Presenter	Title
2:45 PM	BS16	Dr. Adil Sarhan	Quantitative Proteomics Identifies a Role for LAR in Regulation of Mitochondrial Respiration
3:00 PM	BS19	Bakhtyar Othman	Residual concentrations of pesticides and effects on farmers
3:15 PM	BS20	Blnd Ibrahim Mohammed	Cloning Optimization of USP47 in E. coli

Biomedical Science Sessions: Hall 303 Friday, 20-9-2019

Session Chair: Dr. Zana R. Majeed

Time	Code	Presenter	Title
3:45 PM	BS21	Chiman M Jawdat	Serum Endothelin-1 levels as a risk marker in Hyperthyroid Patients
4:00 PM	BS22	Dr. Dlnya Asad	Joubert syndrome: A rare genetic disorder reported in Kurdish family
4:15 PM	BS23	Ali M.A. Al-Kufaishi	A New Bio-Marker To The Evaluation Of Patients Status With Chronic HPV 16 Cervicitis Through Glutaredoxin-Reduced Glutathione And Total Thiol Groups System

Biomedical Science Sessions: Hall 303 Friday, 20-9-2019

Session Chair: Dr. Sahand Ismael

Time	Code	Presenter	Title
4:30 PM	BS26	Fawwaz F. Ali	Investigation the role of syntenin in Salmonella Typhimurium uptake
4:45 PM	BS27	Hamdia Hateem Al-Shammary	Kinetic, thermodynamic and optical properties study of biosynthesis of zinc oxide nanoparticles
5:00 PM	BS28	Hazha J. Hidayat	Detection of β-globin Gene Mutations Among β-thalassaemia Carriers and Patients in Erbil: results from a single center study

CONCURRENT SESSIONS PROGRAM

MED - Medical
BS - Biomedical Sciences
PH - Pharmacy
NCH - Nursing and Community Health
DEN - Dentistry

Biomedical Science Sessions: Hall 302 Friday, 20-9-2019

Session Chair: Dr. Himdad Hawez

Time	Code	Presenter	Title
11:15 AM	BS29	Ibrahim Yaseen	Knockout of the tumor promotor transmembrane protein Tspan2 using CRISPR-Cas9 technology reveals reduced adhesion of human lung adenocarcinoma cells
11:30 AM	BS30	Dr. Hero Ismael	Isolation of dermatophyte infection from cutaneous infection patient
11:45 AM	BS31	Staar Mohammed Qader	The relation of Interleukin-4 with Humoral immune response to HCMV antigens among pregnant women

Biomedical Science Sessions: Hall 302 Friday, 20-9-2019

Session Chair: Dr. Sardar Karash

Time	Code	Presenter	Title
2:00 PM	BS32	Kasra Sadeghi	Optimization of bacillus cereus detection based on hemolysin bl and non-hemolytic enterotoxin c genes by multiplex pcr
2:15 PM	BS33	Reza Azizian	Characterization of a Podoviridae member phage isolated against klebsiella pneumoniae
2:30 PM	BS34	Dr. Rana Kadhim Mohammed	Molecular Detection of usp virulence gene, and phenotyping of biofilm formation of E. coli isolated from different clinical samples

Biomedical Science Sessions: Hall 302 Friday, 20-9-2019

Session Chair: Dr. Abas Salihi

Time	Code	Presenter	Title
2:45 PM	BS35	Ahmad H. Ibrahim	Studying Errors in handling Patient's specimen in laboratories of Basrah Hospitals
3:00 PM	BS36	Ahmad H. Ibrahim	Survey about latex allergy among doctors, health staff, and patients in Basrah
3:15 PM	BS37	Mudhir S. Shekha	A comparative analysis of biochemical and hematological parameters in Coronary artery disease and normal adults
3:45 PM	BS38	Marwan Khalil Qader	The prevalence, molecular characterization and antimicrobial susceptibility of klebsiella pneumoniae isolated from different clinical specimens
4:00 PM	BS40	Dr. Mahde Assafi	Molecular Fingerprinting of Methicillin Resistant Staphylococcus aureus Strains Isolated from Human and Poultry

Biomedical Science Sessions: Hall 302 Friday, 20-9-2019

Session Chair: Dr. Ibrahim Yaseen

Time	Code	Presenter	Title
4:15 PM	BS42	Nawshirwan Gafoor Rashid	Demographics and outcome of diffuse large B-cell lymphoma patients in Hiwa Hospital -Iraq-Kurdistan-Sulaimani
4:30 PM	BS43	Nadia N. Hassan	The Role of Frizzled-Related Protein3 Gene Polymorphisms` in Iraqi Patients with knee Osteoarthritis
4:45 PM	BS44	Muhammad Hisham	Synthesis of metal oxide doped graphene photocatalyst for energy and environmental applications
5:00 PM	BS45	Muhammad A. Ahmed	Mitochondrial medicine: Iraqi project

CONCURRENT SESSIONS PROGRAM

MED - Medical
BS - Biomedical Sciences
PH - Pharmacy
NCH - Nursing and Community Health
DEN - Dentistry

Nursing and Community Health Sessions: Hall 308 Friday, 20-9-2019

Session Chair: Dr. Kazhan Ibrahim Mahmood

Time	Code	Presenter	Title
11:15 AM	NCH01	Jwan Ibrahim Jawzali	Malnutrition among Adolescents Pregnant at Maternity Teaching Hospital in Erbil city
11:30 AM	NCH03	Dr. Sarah Muhyedin	Analysis of the Role of Healthcare Providers in the Cessation of Tobacco Smoking Based on Quantitative Data
11:45 AM	NCH04	Dr. Hamdia Mirkhan Ahmed	Association Between Women's Satisfaction with Communication of Physicians/Midwives in Delivery Room and their Satisfaction with Birth Care

Nursing and Community Health Sessions: Hall 308 Friday, 20-9-2019

Session Chair: Dr. Karwan Amin

Time	Code	Presenter	Title
2:00 PM	NCH05	Mohamed Sadeq Al-Ibrahim	The Impact of the Anxiety, Quality of Life, and Academic Performance Factors Effects on the Irritable Bowel Syndrome (IBS); Study Among Students at Zakho Technical Institute, Kurdistan Region of Iraq
2:15 PM	NCH06	Beriwan Abdulqadir Ali	Healthcare inequality in ocular clinics in Erbil city: a comparison study between private and public clinics
2:30 PM	NCH07	Brisk H. Rashad	30-Days Mortality Rate in Patients with ST- segment elevation Myocardial Infarction in Duhok province
2:45 PM	NCH08	Nawfal R. Hussein	The Elimination of HCV in Duhok City: Five Years' Experience

Nursing and Community Health Sessions: Hall 308 Friday, 20-9-2019

Session Chair: Dr. Amani Layth Hameed

Time	Code	Presenter	Title
3:00 PM	NCH11	Haitham Issa Albanna	Prevalence and Patterns of Use of Nutritional Supplements Among Gym Going Population
3:15 PM	NCH12	Shalaw Fris Ahmed	Prevalence of needle stick and sharp injuries among different genders at a surgical specialist hospital-cardiac center in Erbil city: A cross-sectional study
3:45 PM	NCH13	Surkew L. Mahmud	Risk stratification, clinical events and in hospital mortality in patients with acute coronary syndrome admitted to coronary care unit of Sulaymaniyah cardiac hospital
4:00 PM	NCH14	Sangar Muhammad Ahmed	Effect of Low Carbohydrate Diet Compared to Low Fat Diet in Reversing the Metabolic Syndrome Using IDF Criteria

Nursing and Community Health Sessions: Hall 308 Friday, 20-9-2019

Session Chair: Asst. Prof. Shukir Saleem Hasan

Time	Code	Presenter	Title
4:15 PM	NCH16	Nasir Al-Allawi	Prevalence and molecular characterization of Glucose-6-Phosphate dehydrogenase deficient variants among the Kurdish population of Northern Iraq
4:30 PM	NCH18	Mohammad Hasan Ali	Thyroid function abnormality in type 2 diabetes among Iraqi population
4:45 PM	NCH19	Dr. Kazhan Mahmood	Kurdish women's labor and birth experiences

CONCURRENT SESSIONS PROGRAM

MED - Medical
BS - Biomedical Sciences
PH - Pharmacy
NCH - Nursing and Community Health
DEN - Dentistry

Pharmacy Sessions:

Hall 305 Friday, 20-9-2019

Session Chair: Dr. Javed Ahmad

Time	Code	Presenter	Title
11:15 AM	PH02	Muhammad A. Ahmed	Role of hypoxia and hypoxia mimetic agents in mitochondria dysfunction
11:30 AM	PH04	Suhad Faisal Hatem Al-Mugdadi	The Effect of Boswellia Carterii on Monocyte Chemoattractant Protein-1(MCP1) Immune marker in Diabetic Patients
11:45 AM	PH05	Dr. Ghada AL-Ouda	Activity of Zinc Oral Dispersible Tablet on Marjory Clinical Type of Recurrent Aphthous Stomatitis Ulceration, a Clinical Trial Human study

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INTERNATIONAL CONFERENCE ON
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CONCURRENT SESSIONS PROGRAM

MED - Medical
BS - Biomedical Sciences
PH - Pharmacy
NCH - Nursing and Community Health
DEN - Dentistry

Dentistry Sessions:

Hall 305 Friday, 20-9-2019

Session Chair: Dr. Renuar Fadhil

Time	Code	Presenter	Title
2:00 PM	DEN03	Dr. Ali Waad	Augmentation of Surgically Created Bony Defects Using Biphasic Calcium Phosphate with and without Platelet Rich Fibrin: An Experimental Study in Sheep
2:15 PM	DEN04	Dr Anas Hussien Yousif	Cyclic fatigue and centering ability of different single file systems

Dentistry Sessions:

Hall 305 Friday, 20-9-2019

Session Chair: Dr. Duran Kala

Time	Code	Presenter	Title
2:30 PM	DEN05	Heba Kazhaal Mahmood	Association between Anti-CMV IgG and Salivary Levels of IL-6 and TNF-α in Chronic Periodontitis
2:45 PM	DEN06	Sabrya Najeeb Ibraheem	Molecular and immunohistochemical study of human dental pulp tissue response of caries teeth

Sessions Chair: Asst. Prof. Dr. Las Hawezy

Time	Code	Presenter	Title
11:15 AM	MED01	Bahrooz Azeez M. Shareef	Outcomes of cochlear implantation in children in Erbil

Outcomes of cochlear implantation in children in Erbil city

*Bahrooz Azeez M. Shareef 1, Abdulkhaliq K. Emin 2

1 Hawler Medical University; KBMS candidate in ENT- head and neck surgery; Iraq/Kurdistan/Erbil-MRF Quattro towers
2 Consultant ENT- head and neck surgery; Program director of ENT- HNS at KBMS; Head of ENT-HNS department at Rizgary teaching hospital; Lecturer at Hawler Medical University; Research Supervisor Iraq/Kurdistan/Erbil-Royal City

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Abstract:

Background and objectives: The aim of the study is assessing the outcomes of cochlear implantation (CI) in children. Then, evaluating the CAP score in post implant children and its correlation with the age of the child at implantation, level of parent's education and compliance with rehabilitation program.
Method: Children with congenital bilateral profound sensorineural hearing loss and whose ages are 0-10 years at the time of implantation were included in the study. Their postoperative outcomes were assessed using the Categories of Auditory Performance score (CAP): the effect of child's age at CI insertion, parent's level of education and compliance with rehabilitation on outcome assessed by using CAP score.
Results: A total of 57 children were studied. The age at implantation had significant impacts on the postoperative outcomes. The younger the child's age at the time of implantation, the better were the postoperative outcomes. However, there was no significant relation between parent's education and CAP score even with parents who attend high school and possess higher degrees. There was also no significant correlation between compliance with rehabilitation program and CAP score.
Conclusion: Cochlear implantation changes the child's and the family's life by improving auditory perception and speech intelligibility of children who are suffering from profound sensorineural hearing loss. So, early implantation should be promoted and encouraged.
The outcome not affected by parent's education and rehabilitation.
Keywords: cochlear implantation, rehabilitation, parent's education, CAP score

Sessions Chair: Asst. Prof. Dr. Las Hawezy

Time	Code	Presenter	Title
11:30AM	MED06	Ferhad Mohammed Rasheed Ahmed	Attributes of Patients with Perforated Duodenal Ulcer in Duhok City

Attributes of Patients with Perforated Duodenal Ulcer in Duhok City

*Ferhad Mohammed Rasheed Ahmed 1 and Mowafak M. Bahaddin 2

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Abstract

Background: Perforation of peptic ulcer is regarded as one of the most common abdominal surgical emergencies. The objective of this study was to describe the clinical features and potential risk factors among patients with perforated duodenal ulcer in Duhok city.
Subject and Methods: This is a prospective descriptive study done at the Emergency Teaching Hospital in Duhok city, over a period of one year (1st of January 2015- 31st of December 2015). The study included 35 patients who were operated upon for perforated duodenal ulcer. The clinical findings and probable risk factors for perforation of the duodenal ulcer were studied.
Results: Age of the patients ranged from 15-80 years; the most common age group affected was the 20-39 years old (54.2%). Twenty-eight (80%) were males. Helicobacter pylori antibodies were found in 26 patients (74.2 %) while history of ingestion of non-steroidal anti-inflammatory drugs in 25 (71.4%). Twenty-one patients (60%) were smokers and 10 (28.5%) alcoholic. Past history of chronic peptic ulcer was present in 12 patients (34.2%), positive family history in 4 (11.4) and history of ingestion of steroid in 2 (5.7%). Duration of symptoms for more than 24 hours was present in 20 patients (57.1%), generalized abdominal pain in 19 (54.2%), epigastric pain in 16 (45.7%), nausea in 18 (51.4%), vomiting in 12 (34.2%) and rigid abdomen in 26 (74.2%).
Conclusions: Young age, male gender, Helicobacter pylori infection, ingestion of non-steroidal anti-inflammatory drugs, and smoking seem probable risk factors for occurrence of duodenal ulcer perforation. Late presentation was not uncommon.
Keywords: Duodenal ulcer perforation, Clinical features, Risk factors

Sessions Chair: Asst. Prof. Dr. Las Hawezy

Time	Code	Presenter	Title
11:45 AM	MED24	Hez Nihad Mohammed Fadhil	Serum Albumin in Colorectal Cancer

Serum Albumin in Colorectal Cancer

*Hez Nihad Mohammed Fadhil 1, Tahir Abdulla Hussein Hawramy 1, Dara Ahmed Mohammed 1

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Abstract

Background: Albumin is the major plasma protein in human body synthesized exclusively by the liver hepatocytes and secreted directly into the circulation. A drop in the serum albumin level is known as hypoalbuminemia. Colorectal cancer is the fourth commonest form of cancer worldwide and it is the commonest malignancy occurring in the gastrointestinal tract. Objective: a retrospective observational study was conducted to find the correlation between low serum albumin and worsened prognosis of colorectal cancer.
Methods: Data were collected from patients admitted at the Sulaymaniyah teaching hospital. Sum of 55 patients were included in the study. The data were analyzed using statistical program (IBM SPSS), version (25), and (chi square) test was used. Results with P-value (≤0.05, and <0.001) were considered significant.
Results: Our findings illustrated hypoalbuminemia in colorectal cancer, age was directly proportional to correlation, male-to-female ratio was 1.2, and smoking although did not have a direct impact, results of the smokers showed increased hypoalbuminemia in them.
Conclusion: We found that hypoalbuminemia occurs in colorectal cancer (60%) of the cases and the range increases with age, smoking and male gender is slightly higher. Past medical and surgical history were not significant. Regarding the family history of cancer 32.7% of the cases had cancer of a 1st and/or 2nd degree relative(s).
Keyword: Albumin, Cancer, colorectal.

Sessions Chair: Asst. Prof. Dr. Las Hawezy

Time	Code	Presenter	Title
2:00 PM	MED22	Professor Jaafar Mahboba	The Effect of Timing of Dexamethasone Administration on Its Efficacy as a Prophylactic Antiemetic for Postoperative Nausea and Vomiting in Tonsillectomy surgery

The Effect of Timing of Dexamethasone Administration on Its Efficacy as a Prophylactic Antiemetic for Postoperative Nausea and Vomiting in Tonsillectomy surgery

*Professor Jaafar Mahboba 1 and Dr. Thabit Assem Hussein 2

1. Head of Anesthetic Department, Medical college/Kufa University
2. Kufa Surgery, Anesthesia

*Corresponding author: Professor Jaafar Mahboba jafaar.mahboba@uokufa.edu.iq

Abstract

Background: Postoperative nausea and vomiting (PONV) is common after general anesthesia, occurring in 30% to 40% of all patients. Emetogenic drugs used in anesthesia include nitrous oxide, physostigmine and opioids. These drugs are thought to stimulate the chemoreceptor trigger zone (CTZ). The location of this area is on the floor of the fourth ventricle and is effectively outside of the blood-brain barrier. Dexamethasone exerts its antiemetic effects through central inhibition of the nucleus tractus solitarii but not the area postrema. Although dexamethasone is effective in preventing PONV associated with surgical procedures, the optimal timing of its administration for its efficacy as a prophylactic antiemetic on PONV has not been studied.
Objective: To get the most suitable timing of dexamethasone administration as antiemetic in tonsillectomy patients to prevent post-operative nausea and vomiting.
Patients and method: This is a prospective, randomized study included 80 patients, presented for tonsillectomy surgery due to chronic tonsillitis. In Al-Sadder Medical City/Otorhinolaryngology Operation Room in Al-Najaf Governorate, throughout the period extending from August 2017 through January 2018. The study population was randomly allocated into two groups of 40 patients in each group in the following way: Group A: received 5mg of IV dexamethasone 10 minutes preoperatively, Group B: received 5mg of IV dexamethasone before the end of surgery after tracheal extubation. Nausea and vomiting were assessed immediately after surgery and at 30-min intervals in the PACU for 2 h. In addition, nausea and vomiting were evaluated every 4 h (except during sleep) by direct questioning or by spontaneous complaint of the patients were evaluated on a ordinal scale (none, nausea and vomiting).
Result: Mean age of entire sample was 25.09 ± 5.03 years and the range was 15 to 35 years. Mean age of the first group (A) was 24.13 ± 4.35 years, whereas mean age of the second group (B) was 26.05 ± 5.71 years. The total sample included 37 (46.25%) male patients and 43 (53.75%) female patients. The rate of PONV in Group A (who received 5 mg dexamethasone preoperatively) was 20 % during evaluation in PACU (0-2 hr) and was 25% in the ward (2-10 hr) whereas the rate of PONV in Group B (who received 5 mg at the end of surgery) was 65% during evaluation in PACU (0-2 hr) and was 28% during evaluation in ward (2-10 hr), the rate of PONV was significantly lower in Group A than Group B in PACU (p-value <0.05) whereas the difference in the rate of PONV was not significant in the ward in both groups.
Conclusion: The prophylactic administration of 5 mg of IV dexamethasone, immediately before the induction of anesthesia, was more effective than at the end of anesthesia for preventing PONV in patients undergoing tonsillectomy.
Keywords: Dexamethasone, Antiemetic, tonsillectomy

Sessions Chair: Asst. Prof. Dr. Las Hawezy

Time	Code	Presenter	Title
2:15 PM	MED28	Dr. Saywan Haias Saeed	Outcome and Complications of Renal Transplantation in Pediatric Age Groups

Outcome and Complications of Renal Transplantation in Pediatric Age Groups

*Dr. Saywan Haias Saeed MBChB 1, **Dr. Aso Omer Rashid 2, and Dr. Shakhaan Hama Ameen MB-ChB, FICMS, CABU 3

1. 5th stage KBMS urology candidate University of Sulaimaniya, Iraq/ Sulaimaniya Governorate.
2. Assistant Professor, University of Sulaimaniya, Iraq/ Sulaimaniya Governorate.
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**Presenting author: Dr. Aso Omer Rashid

Abstract

Objectives: This study aims to outcomes and complications of renal transplantation in recipients under the age of 18, including immediate and late complications and impacts on graft survival.
Patients and methods: From January 2015 to April 2019, 52 patients under the age of 18 years underwent renal transplantation by a same team in two transplant centers in Sulaimaniya Governorate. Same protocol of induction maintenance of immunosuppression done. Side of the graft and various surgical techniques used for anastomosis of the graft vessels. Pre transplant nephrectomy carried out in 8 patients for different reasons. Patients monitored, serum creatinine used as a main indicator for renal function. Doppler ultrasound of the graft was performed within 24 hours of transplantation. Participants followed up for any occurrence of surgical complications, attacks of rejection, or significant infections. All data collected were entered into Microsoft excel worksheet and analyzed using SPSS software version 20. Kaplan–Meier method was applied to determine graft survival at 6months, 1 and 2 years.
Results: There were 52 transplantations, 39 of whom were boys (75%) and 13 were girls (25%). 9 patients were among age group <10 years (17.3%), 11-14 years 12 patients (23.1%), 15-18 years 31 patients (59.6), with a mean age of 14.26±3.4years. Mean weight of the recipients was 43.53±13.69kg. The average follow-up period was 24.5±11.8 months. The 6 months, 1- and 2-year graft survival rates were 96.15%, 94.23%, and 90.38%, respectively. Post-operative major surgical complications were significantly related to overall graft survival <0.001. Lymphocele rate were markedly low in our series. Rejections were successfully overcome in period of the follow up.
Conclusion: For pediatric patients, we found that renal transplantation is now a safe and effective surgical procedure in survival of children with end-stage renal disease. Advanced immunosuppressive protocol and modified surgical techniques is very important in overall graft survival.
Keywords: Pediatric, Chronic Renal Disease, dialysis, Renal Transplantation, Surgical Complications. Graft survival.

Session Chair: Prof. Dr. Saeed Nadhim

Time	Code	Presenter	Title
2:30 PM	MED29	Dr. Fatima Kamal Khalid	Maternal and fetal outcome of abruptio placenta

Maternal and fetal outcome of abruptio placenta

Dr. Fatima Kamal Khalid

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Abstract

Abruptio placenta remain a major cause of perinatal morbidly and mortality globally, though of most serious concern in the developing world. As most known causes of abruptio placentae are either preventable or treatable, an increased frequency of the condition remains a source of medical concern.
Design: A descriptive study The president study was undertaken at Maternity Teaching hospital in Erbil city, Iraq Performed over a period of one year .The study population included all pregnant women to Maternity hospital with vaginal bleeding after 24 week of gestation (diagnosed as abruptio placenta) women having bleeding due to causes other than abruptio like placenta précis, vasa previa and other local lesions were excluded All studied patients underwent a complete obstetrical clinical work up including a detailed history was taken. General physical and abdominal examination were performed. After excluding placenta previa, vaginal examination was performed to assess the Bishop score, speculum examination to exclude local causes. At time of admission full investigations including Hb/blood grouping, playlet, coagulation profile, renal function test, random blood sugar and ultrasound were performed for fetal wellbeing excluding placenta previa.
Keywords: Placenta previa, maternity, abruptio placenta, perinatal mortality

Session Chair: Prof. Dr. Saeed Nadhim

Time	Code	Presenter	Title
2:45 PM	MED07	Ferhad Mohammed Rasheed Ahmed	Solid pseudopapillary tumor of the pancreas in a 17-year-old girl

Solid pseudopapillary tumor of the pancreas in a 17-year-old girl

*Ferhad M. Ahmed 1, Ayad A. Mohammed 2, & Sardar H. Arif 2

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2. University of Duhok, College of Medicine, Department of Surgery, Duhok, Kurdistan Region, Iraq

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Abstract

Solid pseudopapillary tumor of the pancreas is a rare tumor of low malignant potential. The aim of this paper is to present and discuss a case of solid pseudopapillary tumor of the pancreas occurring in a 17-year-old female. A 17-year-old girl presented with dull aching poorly localized left hypochondrial pain for two years, she had no clinical findings on physical examination. Ultrasound of the abdomen showed well-defined 9 cm * 7 cm heterogeneous lesion with cystic contents in the region of the tail of the pancreas. Computed tomography scan (CT scan) of the abdomen showed a mass of 8 cm * 7 cm in the region of the tail of the pancreas; that could be pancreatic mass, left suprarenal mass, or lymphoma. Resection of the mass and histopathological examination confirmed the diagnosis of pseudopapillary tumor of the pancreas. In conclusion, pseudopapillary neoplasm of the pancreas is a rare condition, which needs surgical intervention. Close follow up is necessary to early detection of the recurrence and metastasis.

Keywords: Pancreas, Tumor, Pseudopapillary, Pain, Solid

Session Chair: Prof. Dr. Saeed Nadhim

Time	Code	Presenter	Title
3:00 PM	MED09	Dr. Hishyar A. Najeeb	DNA damage among health workers in radiology departments of Duhok hospitals, Kurdistan Region-Iraq

DNA damage among health workers in radiology departments of Duhok hospitals, Kurdistan Region-Iraq

Dr. Hishyar A. Najeeb MSc., PhD

EACR Ambassador, Department of Medical Chemistry, Genotoxicity Research Unit, Head
College of Medicine, University of Duhok, KRG-Iraq

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Abstract

Health workers and technicians working at radiological departments are, occupationally, exposed to low level of radiation during working hours. This could have determinately effect on cellular macro-environment including the DNA. Cancer researchers have found a gross link between occupational radiation exposure and the increase in cancer rates. Continuous exposure to Ionising radiation can result in spontaneous mutations and generate DNA damages. Heavy doses of ionising radiations are cytotoxic, while low doses have been found to damage the DNA of the exposed cells.
This study aimed to investigate the effect of radiation on DNA in radiology technicians working in Duhok Hospitals and occupationally exposed to continuous low-dose ionizing radiation. By using radiation measurement devices, absorbed radiation doses can be assessed from lead aprons; whoever by the Alkaline Comet Assays technique the damage effect on DNA materials can be directly observed and measured. A certain level of genomic damage among radiology staff could be a risk alarm and an awareness of radiation hazardous.
In this study the Alkaline Comet Assay was used intensively to measure the level of DNA damage in peripheral cells in radiographers and control subjects. Data obtained in this study showed a significant difference (p=<0.0001) between the mean of the DNA damage in all radiographers (those working in Azadi Teaching Hospital and Duhok Emergency Hospital) and in control subjects. Thus, more awareness of radiation hazardous associated with excessive exposure is needed for every health worker performing duties in radiology departments in Duhok Hospitals. Based on the current study findings we recommend using a proper plan for radiation protection system in Duhok Hospitals by providing lead aprons for all radiology technicians and minimizing the exposure time. In addition, a regular assessment of radiation exposure for radiology staff is necessary to provide them further information of radiation detrimental effects on their health.

Keywords: Radiation exposure, DNA damage, Cancer risk

DNA damage Levels among health workers in radiology departments of Duhok hospitals, Kurdistan Region-IraqHishyar Azo Najeeb, MSc., PhD University of Duhok College of medicine Genotoxicity Research Unit, Head Ionizing radiation is one of the today's most important diagnostic and therapeutic techniques in medical fields (1). Radiologists use X-ray radiation to obtain information about the structures and functions of body's organs (2). The International Agency for Research on Cancer (IARC) has considered the X-rays as carcinogenic medical components (3). The potential carcinogenic effect of ionising radiation was identified soon after its discovery. The first radiation-induced skin cancer was recorded in 1902 followed by several cases of radiation induced Leukemia among radiation workers in 1911 (4).). The X-ray can induce DNA damage either by the direct effect of ionising radiations or indirectly through generation of oxidative reactive products (Reactive oxygen species) from water hydrolysis (5). By using radiation measurement devices, absorbed radiation doses can be assessed from lead aprons; whoever by using the Alkaline Comet Assays (ACA) technique the damage effect on DNA can be directly observed and measured. A certain level of genomic damage among radiology staff could be a risk alarm and gives them further awareness of radiation hazardous during occupational work. Data obtained in the current study demonstrate that the total amount of damaged DNA in all radiographers working in Duhok Emergency Hospital is greater than that in those working in Azadi Teaching Hospital. Interestingly a significant difference was observed when the level of damaged DNA of radiographers compared with that observed in control Individuals(p= < 0.0001). The highest level of DNA damage was recorded in radiographers working in Duhok Emergency Hospital (9.488 ± 1.801) followed by those working in Azadi Teaching Hospital (5.333 ± 0.3074) and the lowest level of DNA damage was seen in control sub(2.611 ± 0.3411).

Session Chair: Prof. Dr. Saeed Nadhim

Time	Code	Presenter	Title
3:15 PM	MED34	Husen A. Husen	Capsular retraction in breast cancer liver metastasis, prevalence and feature analysis detected by MDCT

Capsular retraction in breast cancer liver metastasis, prevalence and feature analysis detected by MDCT

Sameeah A. Rashid 1 and *Husen A. Husen 2

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2 Department of Radiology, Rizgary Teaching Hospital, Erbil, Iraq

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Abstract

Background and objectives: Breast cancer is the leading cause of death among women all over the world. It can metastasize to different parts of body including the liver, which can be associated with hepatic capsular retraction. The present study was aimed at examining the prevalence of hepatic capsular retraction associated with liver metastases in patient with breast cancer and its correlation with relevant variables such as metastatic lesion size, number of metastases, tumor receptor status and chemotherapy treatment.
Methods: In a cross-sectional study, 208 women with histopathology proved breast carcinoma whom been referred to Rizgary Teaching Hospital to perform staging abdominal CT scan and/or follow up in the period between august 2018 to May 2019 were enrolled in the study. The CT scan were evaluated for the presence of liver metastases, number of metastases, size of metastases, presence of capsular retraction & it's depth, then correlation was made between each of these variables. The collected data were analyzed using descriptive statistics and Pearson's chi-square test through Statistical Package for the Social Sciences (version 22). Patients with contraindication to intravenous contrast media were excluded from the study.
Results:208 cases were the total number of the patients enrolled in the study with age range between 21 to 91 year, from these 208 cases, 27 women (13%) were found to have liver metastasis & out of these 27 cases, 5 (18.5%) had hepatic capsular retraction. Retraction ranged from 3 to 26 mm. Hepatic capsular retraction was more prevalent in women with multiple metastases (having more than 10 metastases), liver metastasis size change on follow-up, invasive ductal carcinoma, and positive tumor-receptor status; however, these relationships were not significant.
Conclusion: Liver metastases and associated capsular retraction can reliably be diagnosed using multi detector computed tomography. Hepatic capsular retraction is more frequent in women with invasive ductal carcinoma type, larger liver metastases, and positive estrogen receptor status, progesterone receptor, and human epidermal growth factor receptor status.
Keywords: breast cancer, liver metastasis, hepatic capsular retraction, multiple detector computed tomography,

Session Chair: Ass. Prof. Dr. Sinan Petrus

Time	Code	Presenter	Title
3:45 PM	MED02	Dr. Basheer Ali Abdi	Lymphopenia in systemic lupus erythematosus as an indicator of disease activity in Duhok Governorate

Lymphopenia in systemic lupus erythematosus as an indicator of disease activity in Duhok Governorate

Dr. Basheer Ali Abdi

College of Medicine, University of Zakho, Zakho, Kurdistan Region, Iraq

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Abstract

Background: Systemic lupus erythematosus (SLE) is an autoimmune disease in which organs and cells undergo damage initially mediated by tissue-binding autoantibodies and immune complexes. Lymphopenia is a common hematological feature in patients with untreated systemic lupus erythematosus (SLE). It has been associated with disease activity and has both prognostic and diagnostic implications. Lymphopenia may be caused by factors other than SLE. Medications including cytotoxic agents, infections, and hospital setting can also contribute to reduction in lymphocyte count, which may not be a direct reflection of disease activity. The aim of our study is to determine association of lymphopenia with clinical manifestation and laboratory abnormality as well as disease activity.
Methods: Cross sectional prospective study was performed based on clinical and laboratory records. A total of 40 patients who were already diagnosed as SLE in Rheumatology Center in Duhok city participated and all from Duhok Governorate. Full history and clinical examination were done for them in addition to laboratory investigation. Lymphocyte count was expressed in two groups:
1-Normal: count 1500/cmm or more.
2-Lymphopenia: count less than 1500/cmm
The association of lymphopenia with different clinical and laboratory manifestation was examined first and then association of lymphopenia with disease activity index.
Results: Lymphopenia was significantly association with both arthralgia and/or arthritis, and anemia and strongly associated with disease activity (i.e. high SLEDAI).
Conclusion: Lymphopenia is a common laboratory manifestation in patients with SLE and has significant clinical value. It has several associations with clinical/laboratory features. Lymphopenia is significantly associated with the disease activity index (SLEDAI), and it's an indicator of disease activity.
Keywords: Systemic lupus erythematosus, Lymphopenia, Rheumatology, Duhok

Session Chair: Ass. Prof. Dr. Sinan Petrus

Time	Code	Presenter	Title
4:00 PM	MED12	Dr. Naseh Pahlavani	Effects of pyridoxine supplementation on the severity, frequency, and duration of migraine attacks in migraine patients with aura: A double-blind randomized clinical trial study in Iran

Effects of pyridoxine supplementation on the severity, frequency, and duration of migraine attacks in migraine patients with aura: A double-blind randomized clinical trial study in Iran

Dr. Naseh Pahlavani

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Abstract

Background: Migraine is a chronic disease that affects nearly 6% of men and 18% of women worldwide. There are various drugs, which can successfully decrease migraine symptoms and frequency of migraine attacks, but these drugs usually are expensive. Hence, this study aimed to assess the effects of pyridoxine supplementation on severity, frequency and duration of migraine attacks as well as headache diary results (HDR).
Methods: This double-blind randomized clinical trial study was conducted on 66 patients with migraine with aura (MA) in Khorshid and Emam Mosa Sadr clinics of Isfahan University of Medical Sciences, Iran, in 2013. Patients were randomly allocated to receive either pyridoxine supplements (80 mg pyridoxine per day) or placebo. Severity, frequency and duration of migraine attacks and HDR were measured at baseline and at the end of the study.
Results: Mean age of patients was 34.24 ± 9.44 years old. Pyridoxine supplementation led to a significant decrease in headache severity (−2.20 ± 1.70 compared with −1 ± 1.50; P = 0.007), attacks duration (−8.30 ± 12.60 compared with −1.70 ± 9.60; P = 0.030) and HDR (−89.70 ± 134.60 compared with −6.10 ± 155.50; P = 0.040) compared with placebo, but was not effective on the frequency of migraine attacks (−2.30 ± 4 compared with −1.20 ± 7.80; P = 0.510).
Conclusion: Pyridoxine supplementation in patients with MA was effective on headache severity, attacks duration and HDR, but did not affect the frequency of migraine attacks.

Keywords: Migraine with Aura, Pyridoxine, Headache, Iran

Session Chair: Ass. Prof. Dr. Sinan Petrus

Time	Code	Presenter	Title
4:15 PM	MED15	Fatemeh Ebrahimi	The effect of saffron (Crocus sativus L.) supplementation on blood pressure, and renal and liver function in patients with type 2 diabetes mellitus: A double-blinded, randomized clinical trial

The effect of saffron (Crocus sativus L.) supplementation on blood pressure, and renal and liver function in patients with type 2 diabetes mellitus: A double-blinded, randomized clinical trial

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Abstract

Objective: Microalbuminuria and hypertension are the risk factors for diabetic nephropathy, and increased levels of liver enzymes are prevalent among diabetic patients. The aim of this research was to examine the effects of Crocus sativus supplementation on nephropathy indices, liver enzymes, and blood pressure in patients with type 2 diabetes (T2D).
Materials and Methods: This placebo-controlled, randomized clinical trial was performed among 80 T2D patients. Subjects were randomly assigned to either Crocus sativus (n = 40) or placebo (n = 40) groups and treated with C. sativus and or placebo for 12 weeks, respectively. Alkaline phosphatase (ALP), aspartate aminotransferase (AST), alanine aminotransferase (ALT), serum urea, creatinine, 24-hr urine albumin, systolic blood pressure (SBP), diastolic blood pressure (DBP), physical activity, dietary intakes were measured, and blood samples were taken at baseline and after the 12-week intervention to assess the differences between the two groups.
Results: C. sativus supplementation compared with the placebo resulted in a significant reduction of SBP ($P<0.005$). However, changes in other indices including liver enzymes, serum creatinine, serum urea, and 24-hr urine albumin, and DBP were not significantly different between the two groups ($p>0.05$). Also, no significant changes in dietary intakes and physical activity were seen between the two groups.
Conclusion: This report shows that daily supplementation with 100 mg C. sativus powder improved SBP. However, it did not considerably improve DBP, nephropathy indices and liver functions in T2D patients after 12 weeks of administration.
Keywords: Crocus sativus, Diabetes mellitus type 2, Herbal medicine, Blood pressure, Nephropathy

Session Chair: Ass. Prof. Dr. Sinan Petrus

Time	Code	Presenter	Title
4:30 PM	MED27	Sangar Abubakir Ahmed	Correlation of age and lactation period with idiopathic granulomatous mastitis

Correlation of age and lactation period with idiopathic granulomatous mastitis

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Abstract

Background: Granulomatous mastitis is a rare disease of the breast characterized by chronic inflammatory disease of middle age female but may happened at any ages. Mostly seen in Asian and African. Causes still unknown. but several things regarded to be etiological factor such as local irritation, trauma, undetected microorganism, viruses, bacteria, fungus, parasitic infection and diabetes mellitus.
Aim: To identified correlation between duration of lactation, number of parity and idiopathic granulomatous mastitis.
Methodology: A retrospective study was performed at Sulaimani Teaching Hospital of Sulaimani city in KRG from January 2018 to February 2019. 100 patients were in study 88 of them lactated a 12 non lactated,88 of them were housewife and the rest were employee. Results: The study include 100 patients that age between 27-73 years. all of whom histological examination confirmed IGM. They were distributed into two groups in which house wife that lactate her baby and other employee that not fully lactate her baby.88 of them has history of lactation and the rest non lactate. 81 patients were housewife and lactated her baby and 19 patient's employees not fully lactated.
Conclusion: There is a significant association between the period of lactation and IGM. Another significant factor that increases the risk of IGM is occupational state of the mothers due to lacking the time for lactating their infants. Also, there is a specific age range (27-33 years) that is the highest risk for developing IGM due to higher parity.
Keywords: granulomatous mastitis, Idiopathic granulomatous mastitis, Idiopathic

Session Chair: Dr. Sahand Ismael

Time	Code	Presenter	Title
4:45 PM	MED04	Dr. Salam Zangana	Role of magnesium deficiency in bronchial asthma

Role of magnesium deficiency in bronchial asthma

Dr. Salam Zangana

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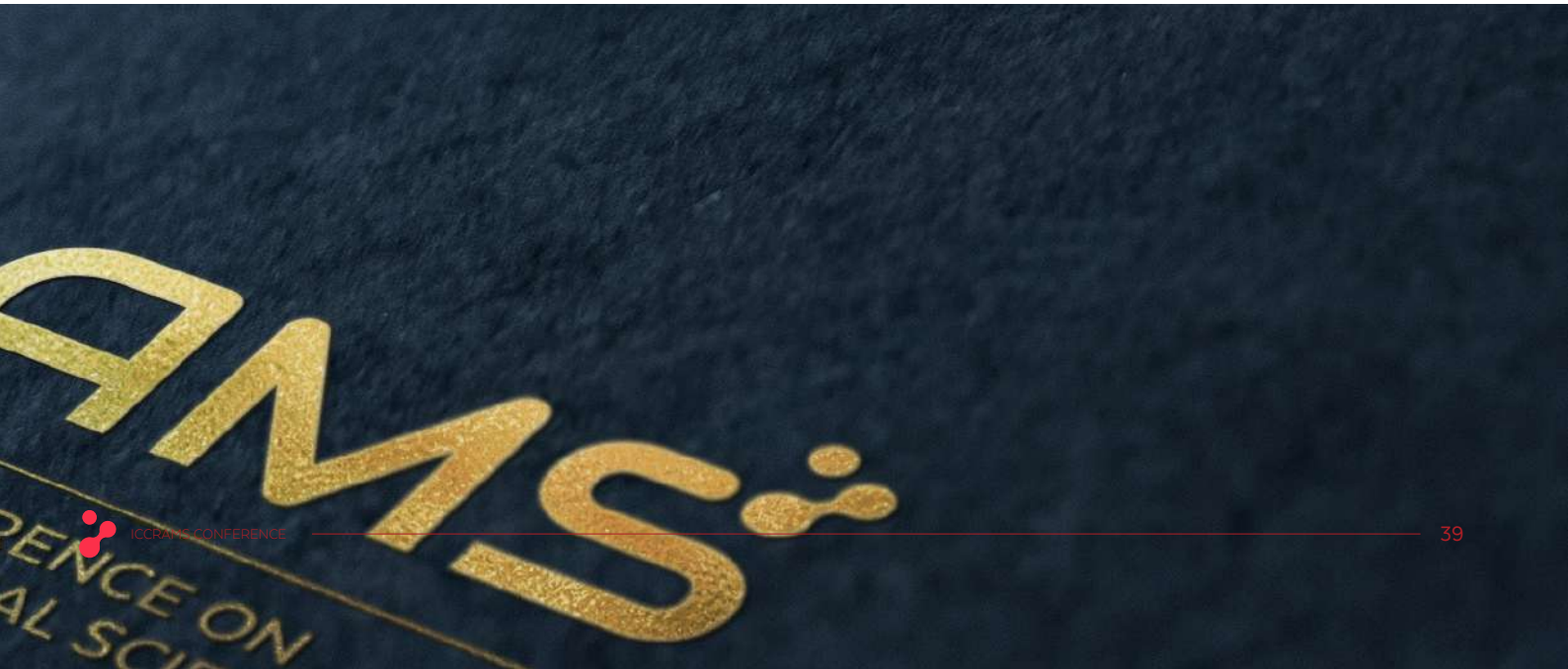
Abstract

Background: Bronchial asthma is a common chronic respiratory disease worldwide. Although magnesium (Mg) deficiency has been shown to play a role in the exacerbation of asthma, the exact prevalence of hypomagnesaemia in asthma is not clear.
Objectives: To estimate the serum Mg levels in bronchial asthma patients and compare them with healthy population and to evaluate the prevalence of hypomagnesaemia among them.
Materials and methods: A cross-sectional study was carried out in the respiratory unit of Rizgary Teaching Hospital involving 80 adult patients with chronic asthma (group I) and 80 healthy adult controls (group II). Serum magnesium level was measured in all the participants.
Results: Hypomagnesaemia was detected in 20% of the asthmatic patients when compared to controls (0%) (p=0.001). No significant association was detected between magnesium status and type of asthma (p= 0.59). There was a statistically significant stage-wise decline in serum levels of Mg with increase in severity of asthma (p=0.02). Patients with severe asthma had the highest prevalence of hypomagnesaemia (45.5%) in comparison to mild and moderate cases (p=0.001). No significant associations were detected between the level of magnesium and the number of medications that the patients used, corticosteroids use, and theophylline therapy (p=0.06, 0.17, and 0.08, respectively). Hypomagnesaemia was significantly correlated with the duration of asthma (p=0.04).
Conclusion: Hypomagnesaemia is more prevalent in chronic asthmatics than non-asthmatics. Hypomagnesaemia was significantly correlated with severity and duration of asthma.
Keywords: Magnesium, asthma, hypmagnesaemia.



Session Chair: Dr. Sahand Ismael

Time	Code	Presenter	Title
5:00 PM	MED30	Adib Friad Hama Sur	The Prevalence of Gall Stone in Patients with Thyroid Dysfunction

The Prevalence of Gall Stone in Patients with Thyroid Dysfunction

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Abstract

Gall stone is a common disease of the digestive system and its prevalence is associated with environmental and genetic factors including thyroid dysfunctions. The association of thyroid dysfunction with gall stone formation in Sulaimani City was evaluated. A Cross-sectional study was performed recruiting 110 patients with thyroid dysfunction in Surgical Teaching Hospital in Sulaimani city during November 1st, 2018 to May 31st, 2019. Inclusion criterion was patient with thyroid dysfunction and exclusion criteria were euthyroid state regardless of gall stones, not performing thyroid function test (TFT) and who refused to participate. The patients' demographic data including age, gender, marital status, occupation, residency, socioeconomic state and body mass index (BMI), levels of TSH, T3, T4, serum cholesterol and assessment of gall stone by using abdominal ultrasonography (US) were recorded. The "Statistical Product and Service Solutions (SPSS) version 25" was used for analysis of data. P-value of (≤0.05) was considered statistically significant. Mean ± SD (standard deviation) of age (year) was 43.1 ± 13.7 (range; 14-79) and 58.2% of them were aged ≥40 years. 80.9% of participants were females with a female: male ratio of 4.2:1 and 90% of the participants were either married or widow. The mean ± SD of TSH and T4 were 5.73 ± 11.39 milli-IU/L and 123.58 ± 58.94 ng/mL, respectively. There was insignificant association between thyroid dysfunction and gall stone formation, but significant associations between age, gender and BMI with thyroid dysfunction. Finally, there was no statistically significant association of thyroid dysfunction and gall stone formation.

Keyword: Gall stone, Prevalence, Sulaimani, Thyroid dysfunction

Session Chair: Dr. Sahand Ismael

Time	Code	Presenter	Title
3:45 PM	MED03	Dr. Ayoob Ali Mohammed	Diarrhea among children below 5 years of age admitted to Al- Salam teaching hospital in Mosul

Diarrhea among children below 5 years of age admitted to Al- Salam teaching hospital in Mosul

Dr. Ayoob Ali Mohammed, M.B.Ch.B D.C.H.

Al-Salam Teaching Hospital

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Abstract

Introduction: Diarrheal diseases are considered the main causes of death among the children in the developing countries. The cause of death is dehydration, dysentery, and persistent diarrhea. We can overcome the dehydration from diarrhea in all age groups by simple and safe and effective method by replacing fluids by oral route.
Aim: To describe cases of diarrhea among children below 5 years of age admitted in the pediatric words in Al-Salam teaching hospital.
Method: We depend upon series of cases in this work and we studied the case-sheets belonging to 329 patients suffering from diarrhea, admitted to pediatric wards from 1st June till 1st December 2011. We analyzed the following information about these cases: age, sex, weight, duration of illness, type of nutrition, and which antibiotics were used.
Results: The pediatric age group less than 1 year constitutes 70.5% of the total patients. Acute diarrhea constitutes 90.5% from the total patients. Bloody diarrhea constitutes 20%. Infants fed on artificial milk (formula) constitutes 17% of the total patients. And 73% of the total patients were given antibiotics.
Conclusion: Absence of breast feeding is considered a big problem among the patients involved in the study. We advise to potentiate the C.D.D program (control of the diarrheal disease) and to also promote a breastfeeding program in the community.
Keywords: Acute diarrhea, Children under 5 Y. of age, Breastfeeding.

Medical Sessions: Hall 305 Friday, 20-9-2019

Session Chair: Dr. Sahand Ismael

Time	Code	Presenter	Title
4:00 PM	MED26	Rebaz Omar Muhammed	Patient satisfaction after appendectomy

Patient satisfaction after appendectomy

Rebaz Omar Muhammed M.B.Ch.B 1* and Faruk Hassan Faraj 1
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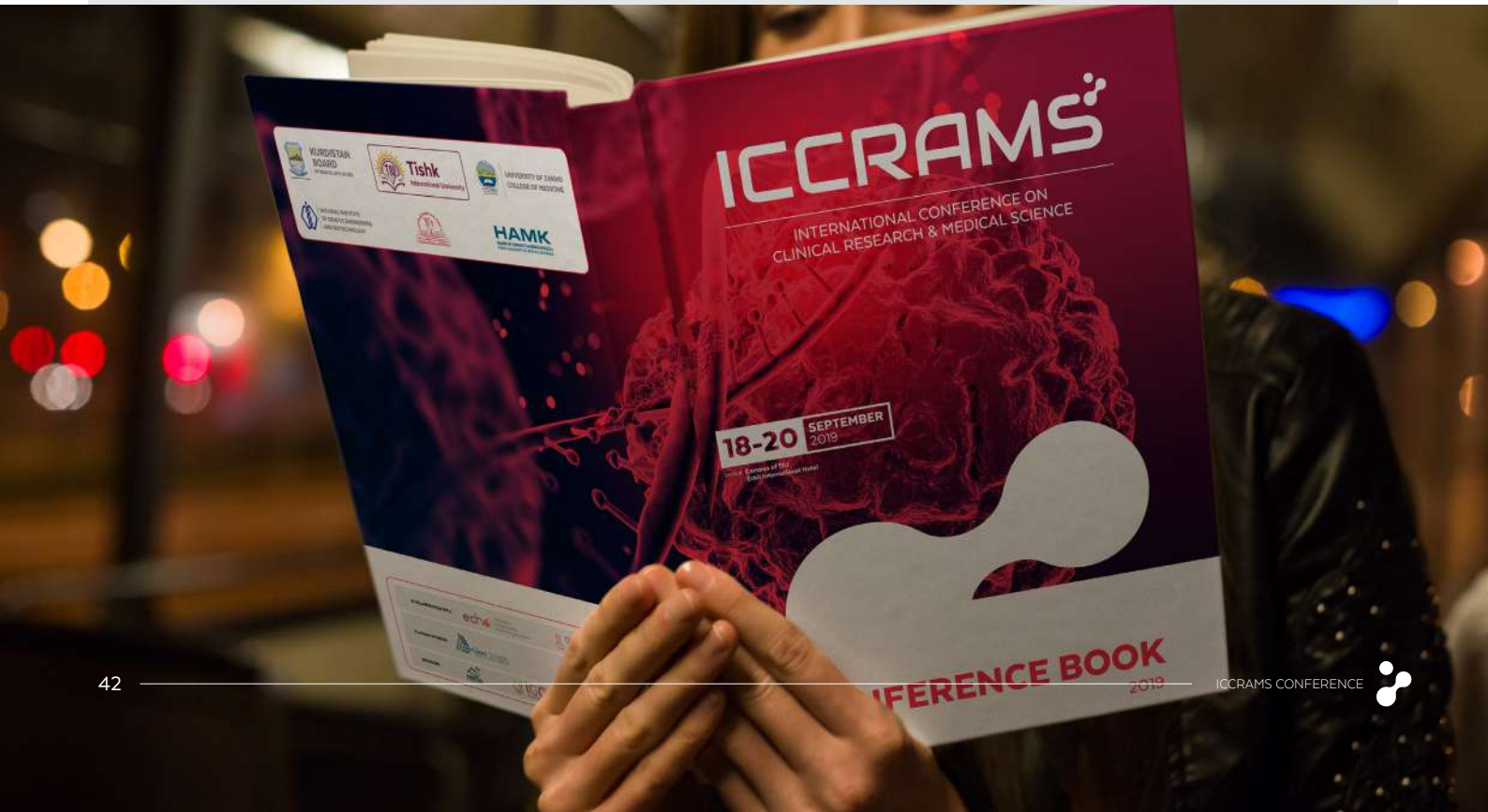
Abstract

Backgrounds and objectives: Patient satisfaction is a complex entity involving emotional, mental, physical, social, and cultural factors; Patient satisfaction is the extent of an individual's experience compared with his or her expectations. The aim of this study was to analyze patients reported expectation and satisfaction regarding the quality of care offered by doctors, nurses and the hospital.
Methods: A questionnaire is given to any patient who had appendectomy and received inpatient care at an emergency hospital within Suliamani city, Iraq. The questionnaire contains 15 questions regarding the care provided by doctors, nurses and hospital.
Results: Patients satisfaction on the care provided for them during their hospital stay was; 62.25% were well satisfied, 23.25% were fairly satisfied, and 14% were unsatisfied by the care provided for them by the nurses, 60.6% were well satisfied, 22.6% were fairly satisfied and 16.6% were unsatisfied by the care provided by the doctors, while 58.75% of them were well satisfied, 26.75% were fairly satisfied, and 16.25% were unsatisfied by the hospital environment during their stay.
Conclusions: The patients in this study agreed fairly with the way the health care providers (especially doctors and nurses) treating them but they were annoyed by the hospital environment and the facilities provided for them.

Keywords: Patient satisfaction; Doctor, Nurse, Pain relief, Hospital facilities



Session Chair: Dr. Sahand Ismael

Time	Code	Presenter	Title
4:15 PM	MED18	Tayeb Sabir Kareem	Jejunojejunal Intussusception following jejunostomy closure a case report

Jejunojejunal Intussusception following jejunostomy closure a case report

Tayeb Sabir Kareem MBChB 1, *Mahmoud Ali Abdi MBChB 2, and Mohammed Niyazi Ghani MBChB 3

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Abstract

Intussusception in adult is almost due to lead point which can be pathological or iatrogenic. Although the most common lead point is benign pathology like adhesion, adenoma, Crohn's disease, however the malignant lead point lesions are not uncommon such as adenocarcinoma, lymphoma, and carcinoid tumor. Intussusception can occur in anywhere in small and large colon, eliocolic intussusception is the most common type in adult and there are few reported cases of jejunojejunal intussusception, we will present a case of jejunojejunal intussusception due to an iatrogenic lead point occurring at the jejunostomy closure site. We received a 60 year-old female complaining of abdominal pain, constipation, repeated vomiting, and midline abdominal wound dehiscence. On arrival she was dehydrated, had nasogastric tube (NGT) draining bilious fluid, the abdomen was soft and not distended because the NGT had drained more than 2000 ml over 24 hours before patient arrival to our hospital and the wound was dehiscence, the vital signs were within normal range. CT of the abdomen showed target sign and jejunojejunal intussusception laparotomy performed after resuscitation and preparation of patient, at laparotomy there was jejunojejunal intussusception, the proximal jejunal segment (intussusceptum) had invigilated in to distal segment (intussuscipiens), the bowel was edematous and dilated but the color was pink and normal. There was mild cyanotic changes over the intussusception segments , careful and complete reduction of intussusception done, the lead point found to be the sutured side of previous jejunostomy, it was disproportionally sutured by running double layers, and it was thick and hard working as lead point for intussusception. Wedge resection of the lead point segment done with end to end anastamosis, wound debridement and primary closure done, patient recovered uneventfully and discharged home at day 5th postoperative.

Keywords: jejunojejunal intussusception, jejunostomy complications, lead point

Session Chair: Dr. Fikry A. Qadir

Time	Code	Presenter	Title
11:15 AM	BS01	Tarik Abdulgadir Abdal	Influence of ethanol extract of aloe vera on liver and kidney parameters in rats exposed to hydrogen peroxide

Influence of ethanol extract of aloe vera on liver and kidney parameters in rats exposed to hydrogen peroxide

Tarik Abdulgadir Abdal 1, *Aziza Raof Haji 1, Balgees Ahmed Ali 2, and Megdad S. Ahmed 3

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Abstract

Introduction: Aloe vera (Aloes) is a member of the Liliaceae family that is used as herbal medicine in many cultures for several purposes. The present study was designed to investigate the role of Aloe vera leaf gel extracts on lipid profiles and liver and kidney functions in rats.
Methods: In the present experimental investigation, a total of 20 healthy rats were equally allocated into four following groups. Group, I fed with normal diet and water. Group II administrated by 1% hydrogen peroxide with drinking water in a dark bottle prepared daily. Group III administrated with 5 ml of aloe vera oil added to 25 grams of their ratio for each rat (25oil/125g) also prepared daily with normal drinking water. Group IV also administrated with 5 ml of aloe vera oil added to 25 grams of their ratio with drinking water that contains 1% hydrogen peroxide in a dark bottle. The rats in all four groups fed for 21 days.
Results: The subjects who were included in H2O2 had significantly higher concentrations of TG (146.79 vs. 73.09 mg/dL; P<0.001), cholesterol (123.60 vs. 68.90 mg/dL; P=0.001), and lower concentration of HDL (5.79 vs. 7.53 mg/dL; P<0.001) compared to the control group. While, the subjects in Aloe Vera group had lower concentration of cholesterol (55.90 vs. 68.90 mg/dL; P=0.004), and higher level of HDL (9.22 vs. 7.53 mg/dL; P<0.001). The subjects in the H2O2 had significantly higher concentrations of GOT (76.64 vs. 30.04; P<0.001), GPT (64.94 vs. 23.38; P<0.001), urea (59.68 vs. 37.10; P=0.003), uric acid (0.92 vs. 0.59; P<0.001). Page 1 of 10Whereas, the subjects in Aloe Vera had substantially lower concentrations of GOT (18.76 vs. 30.04; P=0.008).
Conclusions: The present study showed that aloe vera gel extract is effective to improve the lipid profile and liver and kidney function.
Keywords: aloe vera, lipid profiles, liver and kidney functions, rats.

Session Chair: Dr. Fikry A. Qadir

Time	Code	Presenter	Title
11:30 AM	BS05	Amira Saeed Khalil	High Risk Human Papilloma Virus Genotypes in Kurdistan Region In patients with Vaginal Discharge

High Risk Human Papilloma Virus Genotypes in Kurdistan Region In patients with Vaginal Discharge

*Amira Saeed Khalil 2, Nawfal R. Hussein 1, Ibrahim A. Naqid 3

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Abstract

Human papilloma virus (HPV) is considered as the major risk factor for the development of cervical cancer. This virus is of different genotypes and generally can be classified into high and low risk types. The aim of the study is to determine the rate of high-risk HPV genotypes in women with vaginal discharge and lower abdominal pain in Kurdistan region, Iraq. Cervical swabs were taken from 104 women referred to infectious disease unit with vaginal discharge and lower abdominal pain. DNA was extracted and the polymerase chain reaction (PCR) technique was used to determine the presence of high-risk genotypes. The results of the study found that 13/104 (12.5%) of the samples were positive for high risk HPV genotypes. Amongst those who were positive, 4/13 (30.7%) were typed as genotype 16 and 7/13 (53.8%) showed mixed genotyping. On the other hand, genotypes 53 and 56 were found in only one sample each. In conclusions, the high-risk HPV genotypes are not uncommon and further community-based study is needed to determine the prevalence of HPV and its genotypes and plan for prevention of infection.

Keywords: HPV, high risk group prevalence, vaginal discharge, cervical cancer, Iraq, Kurdistan Region

Session Chair: Dr. Fikry A. Qadir

Time	Code	Presenter	Title
11:45 AM	BS06	Dr. Ibrahim A. Naqid	Serological Study of IgG and IgM Antibodies to Cytomegalovirus and Toxoplasma Infections in Pregnant Women in Zakho City, Kurdistan Region, Iraq

Serological Study of IgG and IgM Antibodies to Cytomegalovirus and Toxoplasma Infections in Pregnant Women in Zakho City, Kurdistan Region, Iraq

*Dr. Ibrahim A. Naqid 1, Yousif SH 1, and Hussein NR 1

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Abstract

Toxoplasma gondii and Cytomegalovirus (CMV) can cause a range of diseases in pregnant women and lead to adverse fetal outcomes. Therefore, the detection of these infections is necessary during pregnancy. The aim of this study was performed to estimate the seroprevalence of Toxoplasma, and Cytomegalovirus infections among the pregnant women with history of abortion in Zakho city, Iraq. Over a period of five years from 2014-2018, blood samples were collected from 500 subjects aged 16-45 years old and tested to identify the presence of specific IgG and IgM to Toxoplasma and CMV infections by Enzyme Linked Fluorescent Assay (ELFA) method. Of the 500 pregnant women, 145 (29%) and 7 (1.8%) were seropositive for anti-Toxoplasma IgG and IgM, respectively. IgG seropositivityto T. gondii infection varied significantly between age groups (p=0.05). Additionally, the seroprevalence of IgG and IgM antibodies for CMV was 475 (95%) and 9 (1.8%), respectively. Estimation of age specific subgroups showed high CMV IgG seropositivity rates for all age group with no significant differences between them. Altogether, 145 cases were verified seropositive for specific IgG antibody against both pathogens, and only 2 cases were positive for specific IgM against both agents. In conclusion, anti-Toxoplasma and CMV IgG and IgM antibodies positivity rates among pregnant women determined in the present study are quite similar as compared to other studies reported in Kurdistan Region, Iraq. Therefore, it is recommended that all cases with a history of abortion should be routinely screened for these infections in order to avoid undesirable fetal outcomes and other serious complications.

Keywords: Toxoplasma, CMV, seroprevalence, pregnant women, Abortion, Zakho, Kurdistan Region

Session Chair: Dr. Abdulkarim Y. Karim

Time	Code	Presenter	Title
2:00 PM	BS07	Zana SM Saleem	The prevalence of HBV infection in renal transplant recipients and the impact of infection on graft survival

The prevalence of HBV infection in renal transplant recipients and the impact of infection on graft survival

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Abstract

Hepatitis B virus infection (HBV) is a leading cause of increased mortality and morbidity in renal transplant subjects. The purpose of this project was to investigate the prevalence of HBV in patients with renal transplant and compare it with the general population in Duhok city, Iraq. Then, the impact of HBV infection on graft function was evaluated. A total of 560 renal transplant subjects and 2975 volunteers were recruited in this study. All subjects were examined for HB surface antigen (HBs-Ag) positivity. Then, all HBs-Ag positive subjects were tested for viral load, alanine transaminase (ALT), aspartate aminotransferase (AST), serum creatinine and HBV profile. All HBs-Ag positive renal transplant subjects received treatment and were followed up for 24 months. It was found that 6/560 (1.1%) of the renal transplant subjects were HBs-Ag positive while 30/2975 (1.09%) of the volunteers were positive for HBs-Ag ($p>0.05$). After initiation of medications, viral load became undetected within 6 months of treatment. Serum creatinine levels were normal at the end of the study. No major side effects were recorded. The prevalence of HBV in renal transplant subjects was similar to the prevalence in general population. HBV infection did not show any negative effect on the graft function. Further study is needed with a larger sample size to explore the long-term effect of the infection on graft functionality.

Keywords: Hepatitis B virus infection, renal transplant, Treatment

Session Chair: Dr. Abdulkarim Y. Karim

Time	Code	Presenter	Title
2:15 PM	BS13	Ilham Khalid Ibrahim	Assessment of Radiation Dose in Routine X- Ray examinations of Skull, Chest and Abdomen in Children in Teaching hospitals, Rapreen, Rizgary and Hawler in Erbil city

Assessment of Radiation Dose in Routine X- Ray examinations of Skull, Chest and Abdomen in Children in Teaching hospitals, Rapreen, Rizgary and Hawler in Erbil city

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Abstract

Background: The risk of exposure to ionizing radiation may affect children more than adults. Therefore, minimizing radiation exposure to those patients should be measured when they are undergoing X- ray examination. The aim of present study was to determine the limit of radiation doses to pediatric patients examined by routine X- ray in Radiology department of Erbil Hospitals, Erbil, Kurdistan Region, Iraq.
Methods: The study was conducted on children patient, whose ages less than ≤12 years, who underwent X-ray examination to the skull (AP), chest (AP), and abdomen (AP) in Erbil Hospitals.
Conclusion: Entrance skin doses (ESD) delivered to pediatric patients in three Erbil hospitals had been monitored. Higher pediatric dose are not according to ALARA standards. Radiation exposure was found to be higher on skull (AP), chest (AP), and abdomen (AP), which are the most performed radiographic areas in pediatric patients in Erbil hospitals. Consequently, there is a need to monitor radiation exposure to pediatric patients in Erbil hospitals. The risk was extremely high, and there is a need to optimize radiation exposure for children in Erbil hospitals.
Keywords: Pediatrics, Entrance Skin Dose, skull, chest, abdomen.

Session Chair: Dr. Abdulkarim Y. Karim

Time	Code	Presenter	Title
2:30 PM	BS14	Naser Ajami	Phenylketonuria Mutations in Iran: Updated Listing of Mutation Map

Phenylketonuria Mutations in Iran: Updated Listing of Mutation Map

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Abstract

Background: Phenylketonuria (PKU) is a heterogeneous and autosomal recessive metabolic disorder that is mainly caused by mutations in the hepatic phenylalanine hydroxylase (PAH) gene. To date more than 700 different mutations in the PAH gene have been identified that indicate a striking degree of allelic heterogeneity at this locus. In Iran, several studies have been done to investigate the genetics bases of the PKU in different part of the country. In this review we have tried to analyze and present an update of the mutation profile of the PAH gene and the frequencies of detected variants for each cohort as determined in studies.
Materials and methods: Published articles on PKU mutations in Iran were identified through a comprehensive PubMed, Google Scholar, Web of Science (ISI), SCOPUS, Elsevier, Wiley Online Library, and SID literature search using the terms: “phenylketonuria”, “hyperphenylalaninemia”, and “PKU” in combination with “Iran”, “Iranian population”, “mutation analysis”, and “Molecular genetics”. We gave preference to papers published during 2003-2019. The Persian language was also applied on the language of publications.
Results: Among the literatures related to genetics, biochemistry and molecular biology, 17 studies were on the PKU mutations. According to these studies, in different populations of Iran 1174 patients included for mutation detection that resulted in detection of more than 100 mutations including 24 previously unreported variants. Results of genetic analysis of the different cohorts of Iranian PKU patients show that the most prevalent mutation in Iran is the splice mutation IVS10-11G>A. The other prevalent mutations are c.168+5G>C, p.R261Q, p.P281L, p.A300S, c.969+5G>A, c.441+5G>T, p.L48S, p.R176, and p.R252W.
Conclusion: To date, more than 100 different mutations have been detected in patients with PKU living in Iran. Iran is comprised of heterogeneous ethnic groups; therefore, diversity in the mutation spectrum was expected. One notable feature of studied populations is its high rate of consanguineous marriage. Considering this feature, determining the prevalent PKU mutations could be advantageous for designing screening and diagnostic panels in Iran.
Keywords: Phenylketonuria, phenylalanine hydroxylase, mutation profile, Iranian populations.

Session Chair: Dr. Hedy A. Chawshin

Time	Code	Presenter	Title
2:45 PM	BS16	Dr. Adil Sarhan	Quantitative Proteomics Identifies a Role for LAR in Regulation of Mitochondrial Respiration

Quantitative Proteomics Identifies a Role for LAR in Regulation of Mitochondrial Respiration

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Abstract

A key function of mitochondria is the production of energy (ATP) through a process called oxidative phosphorylation (OXPHOS). OXPHOS consists of ATP synthase proteins (complex V) and four respiratory chain complexes (I-IV) with all complexes located in the mitochondrial inner membrane. Signal transduction pathways are mainly depending on phosphorylation events, which are controlled by the activity of phosphatases and kinases. Although kinases have been widely studied, however, much less is known about the contribution of phosphatases to the regulation of cell signalling pathways including OXPHOS. Leukocyte common antigen-related protein (LAR) is a member of the LAR subfamily of receptor-like protein tyrosine phosphatases (RPTPs). To gain insight into the signaling pathways regulated by LAR we have carried out the first systematic analysis of LAR-regulated signal transduction and protein turnover using SILAC-based quantitative proteomic. We have analysed differential phosphorylation and protein expression between wild-type mouse embryo fibroblasts (MEFs) and MEFs in which the LAR cytoplasmic phosphatase domains had been deleted (LARΔP). Within the proteomic data set, a total of 2939 proteins were identified. Of these, 147 proteins showed a significant change in abundance in LAR P MEFs compared with the WT MEFs, suggesting a role for LAR in regulation of protein turnover. GO term analysis revealed enrichment of metabolic processes including the oxidation-reduction process. In addition, higher mitochondrial respiration was observed in LAR P MEFs compared to WT suggesting that LAR suppresses mitochondrial respiration by regulating protein turnover.

Keywords: PTPRF, SILAC, Proteomics, OXPHOS

Session Chair: Dr. Hedy A. Chawshin

Time	Code	Presenter	Title
3:00 PM	BS19	Bakhtyar Othman	Residual concentrations of pesticides and effects on farmers

Residual concentrations of pesticides and effects on farmers

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Abstract

This study intended to determine the residual concentrations of pesticides used in greenhouse cucumber fields and their effects on the farmers that spray it. Sixteen active cucumber greenhouse fields with 96 people (75 sprayers and 21 volunteers as control) randomly had been selected. In all selected greenhouses, abamectin, thiamethoxam, pyridabin, and spirodiclofen pesticides used, their cucumber with leaves and groundwater collected in December 2016, March, June, and September 2017 with workers blood samples, were immediately brought to the laboratory. Results showed the occurrence of residual pesticides in the plant, and groundwater samples with a higher level in plant samples decreased in water samples. In comparison with control, sprayer blood results showed that cholinesterase activity decreased significantly meanwhile, liver function enzymes: serum glutamic oxaloacetic transaminase, glutamic pyruvic transaminase, alkaline phosphatase, direct and total serum bilirubin increased significantly. The kidney function test revealed that the mean serum urea concentration in the sprayers was considerably increased compared to the controls, while there was no significant change between the sprayers and the control serum creatinine. Slight variations in the declining number of red blood cells; however, white blood cells have significantly risen to their upper limit within normal ranges.
Keywords: Blood cell count, environmental residual pesticides, cholinesterase activity, liver and **kidney functions test, serum cholinesterase activity.**

Session Chair: Dr. Hedy A. Chawshin

Time	Code	Presenter	Title
3:15 PM	BS20	Blnd Ibrahim Mohammed	Cloning Optimization of USP47 in E. coli

Cloning Optimization of USP47 in E. coli

*Blnd Ibrahim Mohammed 1, Bushra K. Amin 1, and Abdulkarim Yasin Karim 1 & 2.

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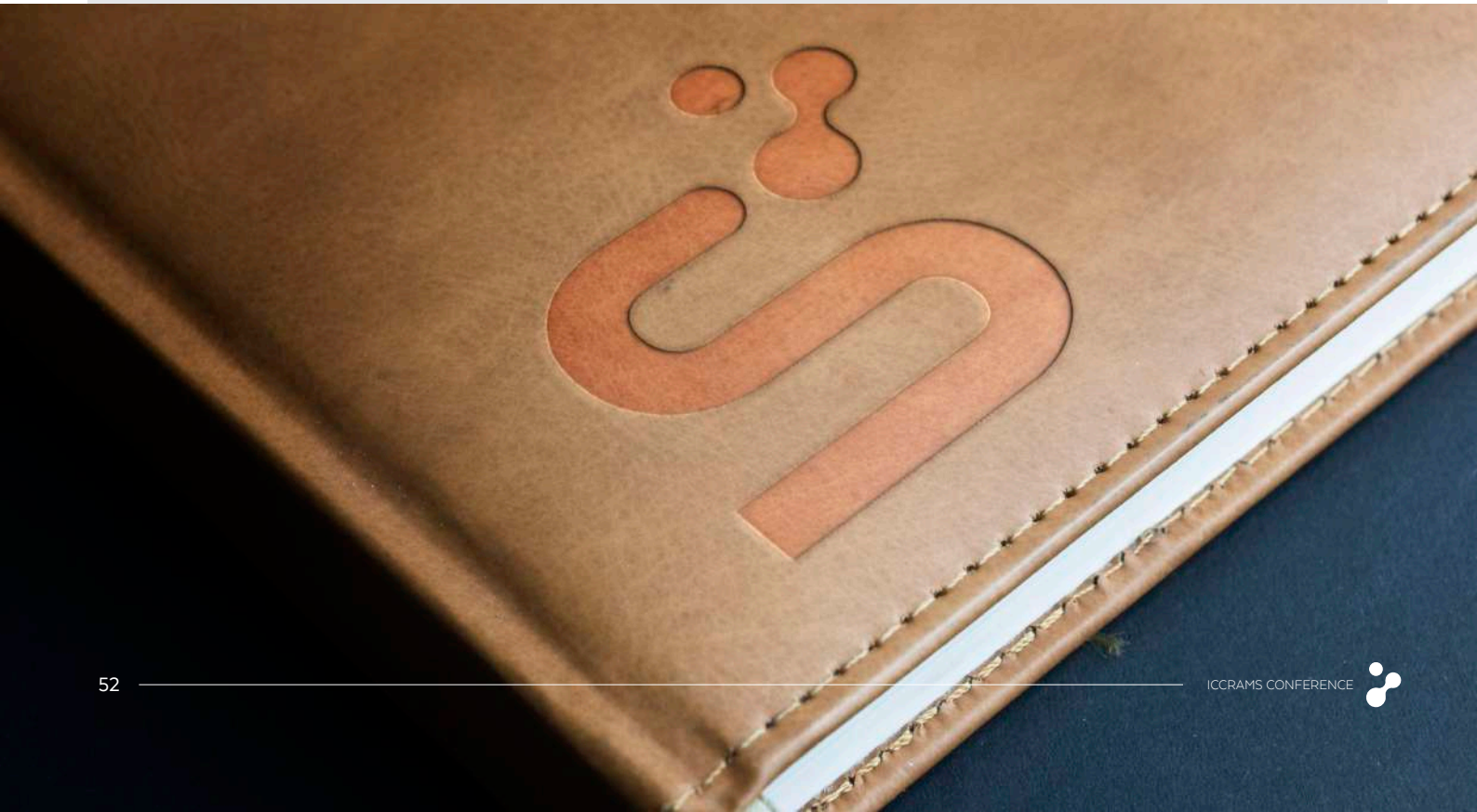
Abstract

Ubiquitin, a highly conserved 76-residue protein, is present in eukaryotic cells either free or covalently joined to a great variety of proteins. Ubiquitin-specific protease47 that specifically deubiquitinates monoubiquitinated DNA polymerase beta (POLB) and acts as a regulator of cell growth and genome integrity. In the present study, we aimed to cloning of cDNA sequence of ubiquitin specific protease 47 short (Catalytic Domain) and detecting optimized conditions for expression in prokaryotic host, the optimal condition of cloning has been detected by the aid of SnapGene program. Optimal condition for the expression of recombinant protein (USP47short) by SDS page were (3hrs incubation time, 1 mM IPTG concentration at the temperature of 37c).

Keywords: Cloning, SnapGene, Polymerase Chain Reaction, Escherichia coli and Ubiquitin Specific Protease.



Session Chair: Dr. Zana R. Majeed

Time	Code	Presenter	Title
3:45 PM	BS21	Chiman M Jawdat	Serum Endothelin-1 levels as a risk marker in Hyperthyroid Patients

Serum Endothelin-1 levels as a risk marker in Hyperthyroid Patients

*Chiman M Jawdat 1 and Ismail M. Maulood 2

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Abstract

The present study was designed to investigate the effect of hyperthyroidism on endothelin-1 (ET-1) level, hemodynamic parameters and relationship between them. Renal and liver function tests were investigated, too.
Methods: In the present study main experiment were carried out. The case study experiment included 129 female subjects divided into three groups, 46 subjects with normal thyroid function test (control), 40 patients with hyperthyroid disease and 43 subjects with carbimazole treated hyperthyroid disease.
Results: Serum ET-1, triiodothyronine (T3), thyroxine (T4) and glucose levels significantly increased in hyperthyroid patients compared with control subjects. Carbimazole treatment significantly reduced the level of ET-1, T3 and T4 levels compared with hyperthyroid patients as well as the oxidative stress marker, Malondialdehyde (MDA) significantly raised in hyperthyroid patients in comparison with control subjects.
Conclusion: These results indicate that blood pressure and heart rate were markedly increased in patient subjects and animal induced-hyperthyroidism. An increase in ET-1, oxidative stress and reduction in NO levels might be the reason behind these increase in blood pressure.
Keywords: Endothelin-1, Oxidative stress, Nitric oxide, Hyperthyroidism, carbimazole

Session Chair: Dr. Zana R. Majeed

Time	Code	Presenter	Title
4:00 PM	BS22	Dr. Dlnya Asad	Joubert syndrome: A rare genetic disorder reported in Kurdish family

Joubert syndrome: A rare genetic disorder reported in Kurdish family

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Abstract

Joubert syndrome is a congenital cerebellar ataxia with autosomal recessive or X-linked inheritance, the diagnostic hallmark of which is a unique cerebellar and brainstem malformation recognizable on brain imaging—the so-called molar tooth sign. Neurological signs were present from the neonatal period and include hypotonia progressing to ataxia, global developmental delay, ocular motor apraxia, and breathing dysregulation. These signs were variably associated with multiorgan involvement, mainly of the retina, kidneys, skeleton, and liver. 30 causative genes have been identified so far, all of which encode for proteins of the primary cilium or its apparatus. The purpose of our project was to detect the mutant gene (INPP5E gene) which cause Joubert syndrome. There were many methods used for diagnosis such as MRI and CT- scan and molecular diagnosis by doing ARMS PCR for detection of mutant gene that we were used in this research project. In this research for individual family which reported, the two children with parents, the two children were affected and were carrier.
Keywords: Joubert syndrome, ARMS PCR, Sulaimanya, Kurdistan region.

Session Chair: Dr. Zana R. Majeed

Time	Code	Presenter	Title
4:15 PM	BS23	Ali M.A. Al-Kufaishi	A New Bio-Marker To The Evaluation Of Patients Status With Chronic HPV 16 Cervicitis Through Glutaredoxin-Reduced Glutathione And Total Thiol Groups System

A New Bio-Marker To The Evaluation Of Patients Status With Chronic HPV 16 Cervicitis Through Glutaredoxin-Reduced Glutathione And Total Thiol Groups System

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Abstract

Objective: Study the levels of glutaredoxin, glutathione and total thiol groups in the serum and mucus for the women with cervicitis by HPV 16 or other causes in the serum and mucus.
Design & Methods: This is a comparative study through divided the cases into three groups, healthy women (G1), chronic cervicitis patients without HPV (G2) and chronic cervicitis patients with HPV (G3).
Results: The results show the high activity of glutaredoxin in the patients (0.24±0.10) for mucus and (0.18±0.01) for a serum with HPV 16, where (0.07±0.01) in mucus and (0.14±.01) for serum in the patients without HPV 16, compared with healthy (0.01±0.00) in serum and (0.07±.01) in mucus.
Conclusion: HPV 16 consist of more than 50% from cervical cancer, but is alone not enough to develop cancer, there are supplement agents such as raise of reactive oxygen species and reduction of antioxidants. The higher levels of glutaredoxin and lower glutathione and total thiol groups in the serum and mucus of the patients compared with control. So, glutaredoxin-glutathione system results consider good biomarker to evaluate the integrity of epithelial cells and patients state.
Keywords: Glutaredoxin, HPV, Cervicitis, cervical cancer, GSH, tumor suppressor proteins.

Session Chair: Dr. Sahand Ismael

Time	Code	Presenter	Title
4:30 PM	BS26	Fawwaz F. Ali	Investigation the role of syntenin in Salmonella Typhimurium uptake

Investigation the role of syntenin in Salmonella Typhimurium uptake

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Abstract

Salmonella is an infectious pathogen linked with human and animal diseases world-wide. These bacteria are characterized by the ability to infect a variety of human cells. Syntenin is a scaffolding protein that is involved in various cell functions and is reported to associate with the tetraspanin protein CD63, which has previously been implicated in the adhesion of Salmonella Typhimurium to human monocyte derived macrophages (MDMs). The aim of this research was to investigate association of the bacteria with cells that had been stably knocked down for syntenin expression. The HeLa syntenin knock down (KD) cell line was generated and used using a pLKO-sh Syntenin clone, while the control cell line was transfected with pLKO-puro vector. HeLa syntenin KD and WT control were infected with different strains of Salmonella Typhimurium. The bacteria were stained, and the bacterial-cells association were analysed using flow cytometer. Surprisingly, the HeLa syntenin KD were more susceptible to Salmonella infection than control cells; however, no significant changes were observed in early stages of Salmonella binding. Tetraspanin expression levels were similar for the KD and the WT cells, but stochastical optical reconstruction microscopy (STORM) analysis did indicate some differences in the distribution of CD63 molecules. Overall, our results suggest that the effects of syntenin KD on Salmonella infection could relate to alternative syntenin partner proteins such as syndecan.

Keywords: Tetraspanin, syntenin, HeLa, pLKO-puro vector

Session Chair: Dr. Sahand Ismael

Time	Code	Presenter	Title
4:45 PM	BS27	Hamdia Hateem Al-Shammary	Kinetic, thermodynamic and optical properties study of biosynthesis of zinc oxide nanoparticles

Kinetic, thermodynamic and optical properties study of biosynthesis of zinc oxide nanoparticles

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Abstract

Biosynthetic zinc oxide nanoparticles (ZnO Nps) were prepared using an aqueous extract of dates (Compressed dates). The UV-Vis spectrum was recorded to monitor the formation of nanoparticles, which showed a blue shift absorption peak at 360 nm. The XRD pattern of ZnO Nps. Powder the peak 2 =31.7 corresponding to the (100) plane of ZnO powder. Avg. Diameter: 74.08 nm. FT-IR spectra of compressed dates extract and ZnO nanoparticles were recorded to identify biomolecules involved in the synthesis process. The higher percentage of phenolic compounds with antioxidant potential provides for reduction of metal oxides, and the significant presence of amino acids, proteins helps stabilize the growth of the nanoparticles. Scanning electron microscopy (SEM) which referred to shape (aggregation) for ZnO nanoparticles. The order of reaction also we were observed and proved it as a Pseudo first order reaction, and we calculated the value of activation energy, enthalpy, the change in entropy and Gippes free energy. The optical the Eg values are calculated using Tauc plots by extrapolation of the linear region of the curve. The calculated band gab value of the film samples around (3.3, 3.4, 3.5) eV.

Keywords: Nanoparticles, biosynthesis, zinc oxide, optical properties.

Session Chair: Dr. Sahand Ismael

Time	Code	Presenter	Title
5:00 PM	BS28	Hazha J. Hidayat	Detection of β-globin Gene Mutations Among β-thalassaemia Carriers and Patients in Erbil: results from a single center study

Detection of β-globin Gene Mutations Among β-thalassaemia Carriers and Patients in Erbil: results from a single center study

*Hazha J. Hidayat 1, Amer Ariamand 2, & Karzan A. Mohammad 3

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Abstract

The β-Thalassemia and hemoglobinopathies are considered common genetic disorders in Kurdistan. The prevalence of such syndromes is of concern. Researchers are seeking all aspects of these diseases in order to shed light on the facts beyond such prevalence. The present study is a retrospective trial to address the frequency of β-thalassemia mutations and hemoglobinopathies in Erbil city, the capitol of the Kurdistan region of Iraq and one of the biggest cities located in in the southern part of Kurdistan. Methodology: For the present study a total of 121 referral cases of 20 families were considered. All inclusively were approached for the study and proper explanation given to the patients. They agreed to fill out a consent form. Blood samples were taken via sterilized procedure and collected in a sterilized tube for 111 cases of the study. The AF (20) were also included. Then case typing and molecular analysis were done using mutation analysis.
Result: The results showed the identification of 9 different β-thalassemia mutations. Throughout molecular analyses, β-thalassemia gene mutations of IVSI.110 (G > A), IVSI.1 (G > A), IVSI.6 (T > C), IVSII.1 (G > A), codon 20 A>T, IVSII.745 (C > G), codon 118 C-T, c.17-18 dele CT were detected.
Conclusion: The results of the present study indicate that β-thal and hemoglobinopathies still appear to be an important public health concern in Kurdistan. However, this is particularly may be attributed with the fact that consanguineous marriages are very common in this area. Genetic counseling should be provided nationwide for premarital couples to prevent homozygote births.
Keywords: β-thalassaemia, β-globin Gene, Mutation

Session Chair: Dr. Himdad Hawez

Time	Code	Presenter	Title
11:15 AM	BS29	Ibrahim Yaseen	Knockout of the tumor promotor transmembrane protein Tspan2 using CRISPR-Cas9 technology reveals reduced adhesion of human lung adenocarcinoma cells

Knockout of the tumour promotor transmembrane protein Tspan2 using CRISPR-Cas9 technology reveals reduced adhesion of human lung adenocarcinoma cells

*Ibrahim Yaseen 1; Murtakab Al-Hijjaj 2; Muslim Aledami 3, 4; Shymaa Abbas 5; Pete Monk 4; & Lynda Partridge 6

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Abstract

Changes in the cellular genomic or proteomic molecules have been associated with the disease incidence, such as cancer. Many of these molecules showed distinct involvement in carcinogenesis and metastasis. Recent studies have reported the involvement of the transmembrane protein Tspan2, a member of tetraspanin family, in the cellular motility and invasiveness of human lung cancer cells. Although human lung cancer is considered one of the leading causes of death among the cancer patients in the UK and worldwide, the associated disease markers are not yet fully understood. The current study explored the gene KO of Tspan2 in the human lung adenocarcinoma cell line, and the adhesion ability upon the gene depletion. Microscopy studies showed that Tspan2 has a distinct distribution and specifically localizes on the surface of A549-human lung cancer cells, with some co-localization observed with the ER and the lysosomes in the cytosol. These gene KO technology may represent valuable tools to further investigate the role of Tspan2 in pathology, monitoring the disease progression, and could introduce a novel therapeutic target.
Keywords: Tetraspanin, Tspan2, lung cancer

Session Chair: Dr. Himdad Hawez

Time	Code	Presenter	Title
11:30 AM	BS30	Dr. Hero Ismael	Isolation of dermatophyte infection from cutaneous infection patient

Isolation of dermatophyte infection from cutaneous infection patient

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Abstract

Seventy samples of hair, nails, and skin were collected from patients with suspected dermatophytosis in Rizgary Teaching Hospital in Erbil city. The patients were from all age groups and of both sexes, 32 (45.7%) cases were males and 38 (54.3%) cases were females. Tinea manuum was the most common clinical type at 30%, followed by tinea pedis at 24.3%. While the lowest rate of infection was tinea cruris and tinea faciei at 4.3% each. Among 26 isolated dermatophytes species, Trichophyton rubrum was the most commonly isolated etiologic agent- 38.5% of the total. Trichophyton verrucosum was ranked second in frequency at 30.8%. Other dermatophytes in descending order were Microsporum canis-15.4%, Trichophyton interdigitale-7.7%, with Trichophyton mentagrophytes and Microsporum gypseum at 3.8% each. Genomic DNA was extracted from all isolated samples (dermatophytes and Candida spp.) by using CTAB method, with high purity 1.7-1.8. The ITS regions from all extracted DNA were amplified by using ITS1/ITS4 primer set, for identification of dermatophytes and Candida species. The products were electrophoresed through 2% agarose gels in TBE buffer and visualized by staining with ethidium bromide under UV irradiation.
Keyword: Dermatophyte, Cutaneous infections, Trichophyton, Microsporum, tinea, fungal PCR, CTAB

Session Chair: Dr. Himdad Hawez

Time	Code	Presenter	Title
11:45 AM	BS31	Staar Mohammed Qader	The relation of Interleukin-4 with Humoral immune response to HCMV antigens among pregnant women

The relation of Interleukin-4 with Humoral immune response to HCMV antigens among pregnant women

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Abstract

Background: Human cytomegalovirus (HCMV) is a beta-herpesvirus that causes lifelong infection in humans especially during pregnancy can cause of congenital abnormalities. The virus-host immune system interaction is controlled by the role of cytokines including anti-inflammatory cytokines as IL-4.
Aim of the study: The aim of the study to determine the specificities of anti-HCMV antibodies for different HCMV antigens in relation to serum Interleukin-4 (IL-4) levels.
Methodology: A cross sectional study was carried out in Kirkuk governorate from February 2018 to May 2019. The number of pregnant women understudies was 360 women presented to some private medical laboratories. The pregnant women were examined for the seroprevalence of HCMV-IgM and IgG by using ECLIA technique, then their specificity determined for various HCMV antigens by using line immune assay, in addition to estimation the level of serum IL-4 levels by using ELISA technique.
Results: The rate of HCMV-IgG, HCMV-IgM and both HCMV-IgG and IgM at the same time among the total examined 400 pregnant women were 266(73.88%), 27(7.5%) and 22(6.1%) respectively. Regarding the specificity of the determined HCMV-IgM to various HCMV antigens (IE1, CM2, p150, p65, gB1 and gB2), the highest rate of HCMV-IgG specificity was 97.7% for gB1 antigen, while the highest rate 96.2% of HCMV-IgM had specificity for gB1 and p150 antigens. Considering the specificity of anti-HCMV antibodies for the examined antigens in relation to serum IL-4 levels, the highest of pregnant women with increased IL-4 level had antibodies for HCMV IE1 antigen.
Conclusions: There was significant relation of the serum IL-4 level with specificity of anti-HCMV antibodies to various HCMV antigens.
Keywords: HCMV; IL-4, CM2; p150; gB.

Session Chair: Dr. Sardar Karash

Time	Code	Presenter	Title
2:00 PM	BS32	Kasra Sadeghi	Optimization of bacillus cereus detection based on hemolysin bl and non-hemolytic enterotoxin c genes by multiplex pcr

Optimization of bacillus cereus detection based on hemolysin bl and non-hemolytic enterotoxin c genes by multiplex pcr

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Background: Bacillus cereus is a Gram-positive, facultative anaerobic, spore forming bacterium, which are widely spread in nature. B.cereus as a food-poisoning organism can cause two types of illness, the diarrheal form and the emetic form. B. cereus produces several toxins, including emetic toxin and at least four other enterotoxins: hemolysin BL or Hbl, nonhemolytic enterotoxin or Nhe and two single proteins, cytotoxin K or CytK and enterotoxin FM or EntFM. This study investigates the molecular detection of Bacillus cereus by Multiplex PCR and using hblA and nheC genes.
Methods: Isolates were grown overnight at 37 °C on BHI broth, and purification of DNA was performed. The PCR reactions were performed for genes hblA and nheC, the PCR of those genes were optimized.
Results: Molecular detection of B. cereus was performed by using specific primers. Multiplex PCR were done for both genes and we were able to see the bands.
Conclusion: Multiplex PCR method has high accuracy and is significant in identifying the pathogen. The results of this study suggest that by using this method we can simultaneously, in less time and with much higher precision than the traditional method and other methods, attempt to review and identify pathogens in food.
Keywords: Bacillus cereus; Enterotoxin Genes; Foodborne Disease; Multiplex PCR

Session Chair: Dr. Sardar Karash

Time	Code	Presenter	Title
2:15 PM	BS33	Reza Azizian	Characterization of a Podoviridae member phage isolated against klebsiella pneumoniae

Characterization of a Podoviridae member phage isolated against klebsiella pneumoniae

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Abstract

Introduction: Klebsiella pneumonia is a gram-negative enteric bacterium that causes varying diseases such as urinary tract infection, septicemia, and pneumonia. K. pneumoniae displaying multiple-drug resistance has increased. Based on some problems by antibiotic therapy such as high cost and side effects there is a need to find a new strategy to overcome this issue. Bacteriophages are the most abundant biological entities on earth. Phages were discovered about hundred years ago by Twort and d'Herelle, which utilized the plaque assay and used phages as an antimicrobial agent against dysentery. The aim of this study was to isolate and characterize phage against K. pneumonia.
Material and Methods: Clinical isolate of K. pneumonia was resistance to Cotrimoxazole. And also had sul1 and dfrA1, int, sul2 genes but had no dfrA5 and sul3genes. Phage isolation and purification according to the method of Cerveny et al. Sample prepared by Uranyl acetat 2% and coated on carbonic grid sheet. Finally, a micrograph taken by electron microscopy. (Electron microscope ZIESS EM 900 at an 80-kV accelerating voltage). DNA extracted by NOREGEN® DNA extraction kit. Random amplification of polymorphic DNA was done according to a modification method of Johansson et al. Phage sediment (with 20% PEG at 12000 rpm for 20 min at 4ċ) were mixed with equal sample buffer and heated in a boiling water bath for 10-15 min. Then used to SDS- PAGE (Pic-5).
Results: Bacteriophages isolated from university sewage against clinical strain of K. pneumoniae. Electron microscopy indicated that this phage belongs to Podoviridae family with a short tail and 100 nm in length. Primer 1, 2 and 3 had bands. But primer 3 could be proper in order to categorize phage's DNA. The phage sedimentation has two bands 50 and 170 KD that these bands were not seen in bacteria SDS page.
Conclusion: Our study has shown how to isolate, characterize and purify a phage from sewage sludge. And phages mostly are specific for a specific host; hence to utilize them against bacteria we must consider some point. First find more phage against specific bacteria, second use cocktail phage and third finding a way to produce a new phage that is able to infect a greater number of bacteria.
Keywords: bacteriophage, Podoviridae K. pneumonia, antibiotic resistance, new antibacterial agents

Session Chair: Dr. Sardar Karash

Time	Code	Presenter	Title
2:30 PM	BS34	Dr. Rana Kadhim Mohammed	Molecular Detection of usp virulence gene, and phenotyping of biofilm formation of E. coli isolated from different clinical samples

Molecular Detection of usp virulence gene, and phenotyping of biofilm formation of E.coli isolated from different clinical samples

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Abstract

Objective: The present study performed to common clinical E. coli isolates, distribution of usp virulence gene and antibiotic resistance pattern of strains in isolations having the ability to biofilm formation.
Methods: A total of 125 samples in different source (urine, burn, and wound) were collected from patients in two hospitals in Baghdad through three months.
Results: Results revealed that 110 samples shown a growth out of 125 samples, from 110 samples shown a growth only 50 isolates (45.45%) was E. coli according to the typical morphological characteristics and biochemical tests. The distribution of 50 isolates of E. coli in female (66%) more than in male (34%), and according to age was more in age group 31-40 years (36%) than anther. While regards with the type of sample, shown most high E. coli isolates (88%) from urine. The results of susceptibility of antibiotic by Kirby-Bauer disc diffusion method against seven types of antibiotic for all 50 isolates of E. coli, showed that the more resistance was found to Aztreonam (86%), and lowest resistance to Imipenem (2%). Also, the biofilm formation was measured by Microtiter plate method (96-well plate), result shown all isolates were able to make biofilm that 7 isolates (14%) weakly adherent, 28 isolates (56%) moderately adherent, and 15 isolates (30%) strongly adherent. The up (toxin) gene from 50 isolates of E. coli, was presented in 41 isolates (82%).
Conclusion: The usp (toxin) virulence gene was detected from common clinical E. coli by polymerase chain reaction technique, in addition to antibiotic resistance to Aztreonam, also the high biofilm production , all these factors cause increase the pathogenesis of E.coli which isolated from all different sources (urine, burn, and wound).
Keywords: E. coli; biofilm formation; usp virulence gene; antibiotic susceptibility

Time	Code	Presenter	Title
2:45 PM	BS35	Ahmad H. Ibrahim	Studying Errors in handling Patient's specimen in laboratories of Basrah Hospitals

Studying Errors in handling Patient's specimen in laboratories of Basrah Hospitals

Ahmad H. Ibrahim 3*, Mustafa R. Mohsen 2, Mohammed R. Shaker 2, Noor Sabeeh 2, Rossull D. Qassim 2, Abeer A. Al-Mawali 4, & *Nibras S. Al-Ammar 1

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Abstract

Objective: This study was carried out in College of Medicine during the period between February-April 2016 to illustrate the errors in handling patient's specimen all the way from patients to laboratory. A total of 138 individuals were asked to answer questions in 3 separated questionnaire forms, 34 were staff of outpatient laboratory in several hospitals in Basrah, 53 were patients attending hospitals of Basrah, and 51 were staff of the diagnostic laboratories in these hospitals.
Material and method: Outpatient staff, patients, and staff of diagnostic laboratories in Basrah hospitals asked to answer questions in three separated questionnaire forms. SPSS version 20 used for analysis the data.
Results: Results indicated some errors in the protocol of specimen selection, handling, and testing by staff of laboratories in Basrah hospitals. Among outpatient staff, the highest frequency (61.76%) was those answered that they do not invert the tube to mix blood specimen with anticoagulant, 58.82% answered that they do not check expiration date on the tube before usage, 58.82% do not send the specimen in a proper way to the laboratory, 50% do not wear gloves, 47.06% have defects in labeling and completing the test form information, 41.18% answered that they do not explain to the patient how to collect the specimen. Among patient group, only 8% males and 28.57% females know what kind of specimen they must obtain, 12% males and 21.43% females wash the urinary opening and the surrounding areas before collecting urine specimen. Only 13.04% of patients within (≤ 35) age group and 20% within (> 35) age group wash the urinary opening and its surrounding areas before collecting urine specimen. Among the laboratory staff, 62.75% do not wear gloves, 54.90% do not mix delayed urine specimen before testing, 52.94% do not change the contaminated test paper, and 50.98% do not wait (10-20) minutes before centrifuging blood specimen, 49.02% do not refuse saliva specimen if sputum required for testing, 41.18% do not refuse hemolyzed or lipemic blood specimen, 35.29% do not refuse improper labeled specimen, 35.29% do not have documentation book, 33.33% do not keep urine specimen in refrigerator for further testing, 31.37% delay in testing urine specimen more than (1 hour), and 15.69% do not know what and where is the discard place.
Conclusions: We concluded from the present study that patients, staff of outpatient and diagnostic laboratories, do many errors in obtaining, handling the patient's specimen which may affect results of the testing and have adverse effect on the patient.

Keywords: Specimen, errors, Basrah, laboratories

Session Chair: Dr. Abas Salihi

Time	Code	Presenter	Title
3:00 PM	BS36	Ahmad H. Ibrahim	Survey about latex allergy among doctors, health staff, and patients in Basrah

Survey about latex allergy among doctors, health staff, and patients in Basrah

Ahmad H. Ibrahim 3, *Nibras S. Al-Ammar 1, Hadeel A. R. Hassan 2, Alyaa A. Aoad 2, Abeer A. Al-Mawali 4, Noor Sabeeh 4, and Safa K. Aklo 2

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Abstract

Objective: This study was carried out in College of Medicine during the period between February-April 2016. Seventy-three individuals with age group between (≤ 30- > 30) years were included in the study, 22 (30.14%) were susceptible to latex and 51 (69.86%) have no susceptibility to latex. The present study studied the distribution of individuals susceptible to latex according to many factors including; gender, symptoms, age group, job status, and having allergy to certain foods. 10 (45.45%) were health staff, 9 (40.91%) were doctors (Doctors, Medical and Dentistry college student were included in the same group), and 3 (13.64%) were patients. The aim of the present study was to identify individuals susceptible to latex in order to be aware in using powdered gloves and latex medical devises for those individuals especially during surgical procedures. The aim was to focus on latex allergy especially in doctors and health staff.
Material and methods: Individuals under study asked to answer questionnaire (Appendix-1). The participant was considered susceptible to latex if he had either previous latex-contact dermatitis (redness, itching, swollen rash at the site of contact), minor or major symptoms of Anaphylaxis reactions (Tightness of the throat, wheezing, itchy throat) after contrast with latex-containing devices. The participant asked if he had allergy to certain foods (Banana, Kiwi for example).
Results: Out of 9 doctors susceptible to latex, (22.22%) were males, (77.78%) were females, (66.67%) were within (≤ 35) age group, (33.33%) were within (> 35) age group, (77.78%) were mild, and (22.22%) were severe cases. Studying symptoms in 7 individuals who have previous surgery showed that 3(42.86%) have tightness of the throat, 1(14.29%) have wheezing and itchy throat, 5(71.43%) have itching and redness, and swollen rash at the site of contact. 2(28.57%) have mouth itching and swollen from certain foods. out of 9 doctors, 2(22.22%) have tightness of the throat, 1(11.11%) has wheezing, and itchy throat, 5 (55.56 %) have itching at the site of contact, 6(66.67%) have redness and swollen rash at the site of contact, 3(33.33%) have mouth itching and swollen from certain foods. Out of 10 health staff, 3(30%) have tightness and itching of the throat, 2(20%) have wheezing, 10(100%) have itching, redness, and swollen at the site of contact, 1(10%) has mouth itching and swollen from certain foods. Results of patient group showed that out of 3, 1(33.33%) has tightness, itching of the throat, mouth itching and swollen from certain foods, 3(100%) have itching, redness, and swollen rash at the site of contact. The distribution of 51 individuals not susceptible to latex according to previous surgery and certain food allergy was studied in the present study. Out of 29 doctors, 5(17.24%) have previous surgery, 1(3.45%) has certain food allergy. Out of 19 health staff, 2(10.53%) have previous surgery, 1(5.26%) has certain food allergy. Out of 3 patients (not susceptible to latex), 1(33.33%) has previous surgery and no patient has certain food allergy.
Conclusions: The present study showed that many doctors, health staff and patients were suspected to have latex allergy. Many health staff have allergy to latex gloves, but they refuse to answer the questionnaire. Most of individuals included in the study have mild symptoms, which might be developed to severe anaphylaxis condition in repeated contact and exposure to latex. Results also showed many individuals susceptible to latex have also certain food allergy like Kiwi, Banana. Itching, redness, and swelling at the site of contact with latex showed high frequency.
Keywords: Latex, allergy, itching, anaphylaxis

Session Chair: Dr. Abas Salihi

Time	Code	Presenter	Title
3:15 PM	BS37	Mudhir S. Shekha	A comparative analysis of biochemical and hematological parameters in Coronary artery disease and normal adults

A comparative analysis of biochemical and hematological parameters in Coronary artery disease and normal adults

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Abstract
Background: Cardiac muscle necrosis has been considered to play an essential role in the pathophysiology of coronary heart disease (CAD), which has commonly evolved as a significance of reduction of compensatory mechanisms and contractile reserve of heart muscle. Elevated levels of creatine kinase MB (CK-MB), troponin I (Tn-I), hs-CRP and Nitric oxide have been regarded as biochemical markers of myocyte necrosis. The objective of this study was to linked serum levels of cardiac muscle enzymes and biomarkers of inflammation, Biochemical and hematological parameters with severity of CAD.
Patients and methods: The patients participated in present study which include 31 cases of newly diagnosed CAD and 31 controls. In all subjects, myocardial serum enzyme levels (CK-MB, Tn-I, hs-CRP, creatinine) and inflammatory indices (NO, fibrinogen, white blood cells, and erythrocyte sedimentation rate) were estimated. Patients were submitted to coronary angiography and CAD severity was estimated by angiography.
Results: Significant differences concerning cardiac enzyme serum levels ($P<0.001$) and inflammatory indices ($P<0.01$) were present to exist between the CAD patients with control. The association between serum uric acid and ischemic heart disease remains dialectical and it has not yet been recognized as cardiovascular risk factor ($P<0.05$). CAD patients according to level of creatinine displayed noticeable increase when compared with control group ($p<0.05$). In current study, increasing blood glucose has emerged as a risk factor for coronary heart disease ($P<0.05$). These studies have reported that serum calcium increased in patient with CAD.
Conclusions: The research suggest that serum levels of myocardial biomarker and inflammatory indices significantly increased in patient with CAD severity.
Keywords: Cardiac biomarker, inflammation, coronary artery disease, Hematological, biochemical.

Session Chair: Dr. Abas Salihi

Time	Code	Presenter	Title
3:45 PM	BS38	Marwan Khalil Qader	The prevalence, molecular characterization and antimicrobial susceptibility of klebsiella pneumoniae isolated from different clinical specimens

The prevalence, molecular characterization and antimicrobial susceptibility of klebsiella pneumoniae isolated from different clinical specimens

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Abstract

Klebsiella pneumoniae is one of the foremost imperative opportunistic pathogens. Urinary characteristic disease is the common infectious bacterial contamination of the contamination caused by K. pneumonia, Resistant bacteria are rising around the world as a danger to favorable results from treating common diseases in community and clinic settings. Samples were taken from 80 patients with diverse diseases infection. K. pneumonia. Isolates were tested for their antimicrobial susceptibility. Genomic DNA of K. pneumonia. Confines were extricated and Detection of ESBL Genes was 53.75% of the isolates were predominance for ESBL Genes blaTEM, blaSHV and bla CTX-M 82.5, 92.5 and 70% % respectively. A add up to of 100 clinical isolates of K. pneumonia gotten from diverse healing centers and therapeutic research facilities in Duhok/Iraq as it were 80 (80%) isolates had a place to the genus K. pneumonia. Ampicillin and Aztreonam 100 % anti-microbial resistance whereas Imipenem Ertapenem Meropenem 100% sensitive. conveyance of ESBLs creating K. pneumoniae among different clinical tests because it was 71.42% in urine, 40. 90 % in wound swabs, 42. 10 % in sputum and 50 % in blood culture. The recurrence of the ESBL production can easily be thought little of within the clinical isolates of K. pneumoniae with the utilize of the current CLSI suggested strategies. An ideal recognizable proof of the ESBL creating isolates is basic to define approaches for an experimental antimicrobial treatment.
Keywords: Klebsiella pneumoniae, ESBL, antibiotic susceptibility, urine infection

Session Chair: Dr. Abas Salihi

Time	Code	Presenter	Title
4:00 PM	BS40	Dr. Mahde Assafi	Molecular Fingerprinting of Methicillin Resistant Staphylococcus aureus Strains Isolated from Human and Poultry

Molecular Fingerprinting of Methicillin Resistant Staphylococcus aureus Strains Isolated from Human and Poultry

Dr. Mahde Assafi

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Abstract

Methicillin-resistant Staphylococcus aureus (MRSA) has been recently identified in poultry and farm workers. The aim was to investigate the antibiogram typing, mecA detection and epidemiological relatedness of MRSA among chickens and farmworker. 306 samples (75 human and 231 chickens) were collected. Isolation and identification were carried out by conventional methods. 50 MRSA isolates were tested for mecA gene and for molecular epidemiological relatedness among human and poultry. RAPD-PCR was carried out for fingerprinting of MRSA isolates genome. MRSA colonization in farm workers and chickens were 28.6% and 32.14% respectively. All MRSA isolates are resistant chloramphenicol and high susceptible towards Erythromycin and Tilmicosin. mecA gene was detected in 28 isolates (12 from human and 16 from chickens). Seven genotypes group (A-G) have been identified. All human MRSA were belonging to genotype A. Whereas, chicken MRSA isolates was belonging to different genotype patterns groups (A-G). To conclude, high prevalence of MRSA was detected. Not all MRSA strains possess the mecA gene. Human MRSA was belonging to one genotype pattern, but the chicken MRSA strains were belonging to seven genotypes. The genotype pattern A was the most dominant among all MRSA isolates. It is possible that the chickens play an important role for the human exposure to MRSA by direct contact.

Keywords: MRSA; RAPD-PCR; mecA; Chicken; Farm workers; Iraq

Session Chair: Dr. Ibrahim Yaseen

Time	Code	Presenter	Title
4:15 PM	BS42	Nawshirwan Gafoor Rashid	Demographics and outcome of diffuse large B-cell lymphoma patients in Hiwa Hospital -Iraq-Kurdistan-Sulaimani

Demographics and outcome of diffuse large B-cell lymphoma patients in Hiwa Hospital -Iraq-Kurdistan-Sulaimani

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Abstract

Background: Diffuse large B-cell lymphoma (DLBCL) is a heterogeneous form of hematological malignancy which comprises about 30% of lymphomas with variable outcome. Onset is usually in the sixth decade of life with male predominance. Morphological, clinical, and biological variation of DLBCL confirms the coexistence of several subtypes of the disease with distinct behavior of each type.
Objective: The objective of this study is to determine the demographics and outcome of patients with DLBCL and compare these with regional and international data.
Patients and Methods: A retrospective study was conducted on 61 patients with confirmed diagnosis of DLBCL. The diagnosis was based on histopathological and immunohistochemistry which was done in the Department of Pathology, Shorsh General Hospital in Sulaimani. The cases were randomly selected according to the availability of data since March 2013–March 2017.
Results: Median age at diagnosis was about 51 years with peak age of incidence between 50 and 64 years, with female predominance. The most common site of the primary tumor was nodal in which cervical lymph node is the most common site, and majority of the patients were in Stage III with predominance of B-symptoms. Vast majority of the patients have normal chest X-ray, and majority of the patients were in remission over a period of 19 months of follow-up.
Conclusion: We found that there is a significant relationship between age, stage, and performance of the patients, while no significant relation between other parameters and the outcome of the patients is near to their Peers internationally.
Keywords: Demographics, diffuse large B-cell lymphoma, outcome

Session Chair: Dr. Ibrahim Yaseen

Time	Code	Presenter	Title
4:30 PM	BS43	Nadia N. Hassan	The Role of Frizzled-Related Protein3 Gene Polymorphisms` in Iraqi Patients with knee Osteoarthritis

The Role of Frizzled-Related Protein3 Gene Polymorphisms` in Iraqi Patients with knee Osteoarthritis

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Abstract

Background: Osteoarthritis is a degenerative articular disease that has a complex pathogeny because various risk factors such as aging, obesity and joint deformation interact in the process of cartilage deterioration. Despite the multifactorial nature of pathogenesis of this disease, from the 50's it´s known that certain forms of osteoarthritis are related to a strong genetic component. The genetic bases of this disease are related to alterations in multiple genes.
Objective: to investigate possible association between (severity of OA) KL grade, clinical features (WOMAC) and susceptibility polymorphisms to OA, such as FRZB3 gene, in order to better define the grading of this disease that would lend opportunities for prevention, early diagnosis, and treatment.
Methods: One hundred and twenty 120 Iraqi patients affected by primary OA, aged (45 years and above) and sixty 60 healthy people (control) at the same age range, with no family history of OA were evaluated at Al-Imamein Al-Kadhimein Medical City (Rheumatology Department). The degree of severity of knee OA was assessed by clinical and radiographic assessment. FRZB rs7775 genotyping is performed using DNA sequencing (Sanger's method) and the level of serum secreted frizzled-related protein 3 sfrp3 protein is measured using Human sfrp3 (FRZB) ELISA Kit Catalog Number. MBS7238827, MyBioSource.com/ USA.
Results: Genotyping of FRZBrs7775 polymorphisms revealed that three different genotypes; homozygote wild genotype WT (CC), heterozygote genotype H (CG) and homozygote mutated genotype MUT (GG). Also, it was revealed highly significant difference in the two alleles (C, G) frequencies between control and Knee OA patients group ($p > 0.001$) that the highest allele G frequency was found in Knee OA patients group giving odd ratio 13.1 with confidence intervals CI (6.12- 28.03). No significant difference was noted in the serum concentration of secreted frizzled-related protein3 (sFRP3) between the three study groups (sever, mild and control).
Conclusion: In this study, 120 of Iraqi people with severe and mild Knee OA are mostly of GG and CG genotypes in the FRZB3rs7775 gene polymorphisms and this alteration in genotype of FRZB3 gene doesn't affect the serum level of secreted frizzled-related protein 3 (sFRP3) because the gene still producing it in the same level but in inactive form that make protein unable to inhibit signaling pathway.
Keywords: frizzled-related protein3 FRZB3 gene, secreted frizzled-related protein3 sfrp3. Knee osteoarthritis

Session Chair: Dr. Ibrahim Yaseen

Time	Code	Presenter	Title
4:45 PM	BS44	Muhammad Hisham	Synthesis of metal oxide doped graphene photocatalyst for energy and environmental applications

Synthesis of metal oxide doped graphene photocatalyst for energy and environmental applications

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Abstract

This work aims to investigate possible approaches to increase the activity of metal oxide- graphene photocatalysts utilizing the sun light being applied in hydrogen production and pollution management. Metal oxide/graphene semiconductors photocatalyst was prepared by microwave-hydrothermal method using ethanol–water as solvent. The photocatalytic activity for environmental contaminants is investigated by measuring the photo-degradation reaction of methylene blue as a model organic pollutant. The photocatalytic H2-production experiment is performed in a 100 mL quartz flask at ambient temperature and atmospheric pressure. A 300-Watt Xe lamp is used as light source to activate the photocatalytic reaction for hydrogen production. The hydrogen gas (H2) is sampled through the septum after 60 min irradiation, and hydrogen is analyzed by gas chromatography. This project is anticipated to open a new possibility in the investigation of metal oxide -graphene composites and promote their practical application in clean and renewable energy.
Keywords: Metal oxide; graphene; photocatalyst; applications

Session Chair: Dr. Ibrahim Yaseen

Time	Code	Presenter	Title
5:00 PM	BS45	Muhammad A. Ahmed	Mitochondrial medicine: Iraqi project

Mitochondrial medicine: Iraqi project

Assistant professor Muhammad A. Ahmed

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Abstract

Mitochondrial-Medicine is branch of medicine deal with mitochondrial diseases and metabolic disorders that affect mitochondria. Focus on diagnose and treat a wide range of these diseases. These vary from metabolic-induced developmental delay to complex problems that involve many body systems. As the powerhouse of the cell, the mitochondrion is essential for life. A large body of research in recent years has established that mitochondria passively producing ATP, sense and respond to changing cellular environments and stresses. Mitochondria are highly dynamic organelles of bacterial origin and have fundamental roles in many processes inside the cells. To fulfil different functions of the cell, mitochondria adjust its biogenetic activity as well as its dynamic fusion and fission. Mitochondria are the only organelle that contain their own genome, the circular mitochondrial DNA (mtDNA) and they are major source of ROS. This project aims to develop and establish an Iraqi Mito-patient registrar for both clinical non-clinical, patient-owned databank of mitochondrial patients all over the country. The goal is to gain more insight, knowledge and understanding of mitochondrial patients. With the explicit permission from the patients the data can be used by researchers to carry out further studies. A designated steering group with IMP is responsible for the execution of this ambitious project. The steering group reports back to the board on a regular basis.
Keywords: Mitochondria, mtDNA, oxidative stress, oxidative phosphorylation

Session Chair: Dr. Kazhan Ibrahim Mahmood

Time	Code	Presenter	Title
11:15 AM	NCH01	Jwan Ibrahim Jawzali	Malnutrition among Adolescents Pregnant at Maternity Teaching Hospital in Erbil city

Malnutrition among Adolescents Pregnant at Maternity Teaching Hospital in Erbil city

*Jwan Ibrahim Jawzali1, Nahida Hassan Abdullah2, & Sahar Ismail Abdullah3

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Abstract

Adolescent pregnancy is a worldwide health problem. Nutritional requirements during adolescent pregnancy are greater than during adult and place adolescents at nutritional risk. The study aims to assess nutritional status by association of anthropometric and biochemical tests with pregnancy outcome.
Methods: A cross- sectional study conducted in delivery unit at maternity teaching hospital in Erbil city from 1st April 2018 to 31st May 2019. The study included 197 convenient sample of (12-18) year's pregnant adolescents. Interview questionnaire was used for collection of the following data: socio-demographic, anthropometric (height, body mass index (BMI), and mid upper arm circumference of mother, (MUAC) , laboratory tests (HB%, general urine examination and protein-urea), and complication of pregnancy (anemia, urinary tract infection, mode of delivery, preterm birth, low birth weight. All data analyzed by SPSS version 22.0.
Results: Majority of Adolescent mothers were housewives with primary education and crowded family. Highest percentage of adolescent mother had normal obstetric history. Approximately half of maternal height was 155-159 cm and they were overweight. Majority of mothers 81.2% were in old adolescences ages 17-18 years and had normal BMI, height and MUAC that caused significant increase in normal gestational ages, normal vaginal delivery (NVD), and decrease in caesarian section C/S and anemia. Majority of fetus were normal without complication. Obesity increase risk of preterm delivery, meconium aspiration, and Rh incompatibility, while over weight and low gestational age ≤ 36 week increase risk of low birth weight, and C/S.
Conclusion: The study concluded that old adolescence ages, had normal obstetrics history, pregnancy outcome and nutritional status. In contrast young adolescents are at risk of abnormal gestational ages and malnutrition indicated by: overweight, obesity, short stature and low MUAC. Consequently increase, risk of pregnancy complication of: C/S, anemia, preterm delivery and low birth weight.
Keywords: Gestation, adolescents, Height, Mid upper arm circumference

Session Chair: Dr. Kazhan Ibrahim Mahmood

Time	Code	Presenter	Title
11:30 AM	NCH03	Dr. Sarah Muhyedin	Analysis of the Role of Healthcare Providers in the Cessation of Tobacco Smoking Based on Quantitative Data

Analysis of the Role of Healthcare Providers in the Cessation of Tobacco Smoking Based on Quantitative Data

Dr. Sarah Muhyedin

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Objective: Tobacco smoking and its related illnesses continue to be a major challenge faced by all the stakeholder in the Kurdistan region of Iraq. Healthcare providers have an active role in cessation programs however in Kurdistan Region they do not sufficiently use their professional privilege to assist in cessation programs among patients who smoke tobacco. This study was aimed to examine the extent of intervention and advice given to patients by healthcare providers regarding smoking cessation.
Methods: A survey on google form was used to collect data among individuals aged 18-39 years old using the Facebook platform to reach the participants. The participants rated the level of intervention of healthcare providers in their smoking habits and advising them into quitting.
Results: From 736 participants, 32% of them have visited a healthcare provider within the last 12, among those who attended a healthcare provider only 44.3 of them were asked if they smoke during their visit and from that only 44.7 % were advised to quit smoking.
Conclusions: The role of healthcare providers, particularly physicians and consultants, is critical in the battle against tobacco smoking. Promoting awareness among individuals and supporting smokers can have a very positive impact in the quitting process.
Keywords: Smoking Cessation; Healthcare provider's Role; Tobacco

Session Chair: Dr. Kazhan Ibrahim Mahmood

Time	Code	Presenter	Title
11:45 AM	NCH04	Dr. Hamdia Mirkhan Ahmed	Association Between Women's Satisfaction with Communication of Physicians/Midwives in Delivery Room and their Satisfaction with Birth Care

Association Between Women's Satisfaction with Communication of Physicians/Midwives in Delivery Room and their Satisfaction with Birth Care

Dr. Hamdia Mirkhan Ahmed

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Abstract

Background and objectives: Effective communication between maternity care providers and women in labor, using simple and culturally acceptable methods, is recommended by World Health Organization. This study aimed to assess the level of women's satisfaction regarding verbal and non-verbal communication of physicians and midwives in delivery room and to find out the association between this satisfaction with their general satisfaction from care during labor and delivery.
Methods: A cross-sectional study was conducted on 1196 women from Erbil city, who had experience of at least one vaginal delivery in public hospitals (Maternity Teaching and Rizgary Hospitals) during January to March of 2019. A questionnaire format is developed by researcher after massive review literature which included two main parts: sociodemographic and obstetrical characteristics and 28 items related to verbal and non-verbal communication of physicians and midwives in delivery room. Data collected through direct interview with the women after taking their acceptance. Frequency, percentage and chi-square test was used for data analysis.
Results: Although 58.4% of the women generally satisfied with communication of midwives and physicians in delivery room but a large percentage (41.6%) were not satisfied. Only 14.6% and 27.3% of the women were completely satisfied with verbal and non-verbal communication of health care providers. There was highly statistically significant association between women's satisfaction with care during labor and their satisfaction from health care providers' communication. Seventy point four per cent of those women who satisfied with care during birth were those who satisfied with communication of the staff of the delivery room. Conclusions: women's satisfaction with communication of health care providers in delivery room lead to their satisfaction with birth care. Health care providers need to improve their communication skills during labor and delivery.
Keywords: Communication, Birth, Health care provider

Session Chair: Dr. Karwan Amin

Time	Code	Presenter	Title
2:00 PM	NCH05	Mohamed Sadeq Al-Ibrahim	The Impact of the Anxiety, Quality of Life, and Academic Performance Factors Effects on the Irritable Bowel Syndrome (IBS); Study Among Students at Zakho Technical Institute, Kurdistan Region of Iraq

The Impact of the Anxiety, Quality of Life, and Academic Performance Factors Effects on the Irritable Bowel Syndrome (IBS); Study Among Students at Zakho Technical Institute, Kurdistan Region of Iraq

Mohamed Sadeq Al-Ibrahim 1, *Ahmad Hamdy Ibrahim 2, and Nalan Linda Fraim 3

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Abstract

Introduction: Irritable bowel syndrome (IBS) is a chronic disorder of the lower gastrointestinal tract. Efficient gastrointestinal sickness is believed to be actual public but reports of its incidence have not usually assessed random community samples, and authorized questionnaires have not been used to elicit symptoms. IBS can affect anyone at any time under any circumstance.
Methodology: This study examined how the symptoms of IBS impacted the levels of anxiety, quality of life, and academic performance among Iraqi students studying at the Zakho Technical Institute located in the city of Zakho in Northern Iraq.
Results: Findings from this study suggest that 16% of the sample were currently suffering from IBS. A total of 357 students participated in the study.
Discussion: IBS is caused by a variety of possibilities ranging from bacterial infection to environmental situations such as contaminated water. Results from the study indicate a gender difference in how food was cooked and living arrangements. One explanation for this finding can be sought out in the cultural makeup of the Iraqi society. Another finding suggests that students with severe levels of anxiety had a GPA of CC. In addition, an interesting finding was that more than 90% of the sample reported having below average quality of life levels. Both positive and negative correlations were found among demographic variables. Level of anxiety and quality of life were also found to be correlated.
Conclusion: Many possible explanations exist for these finding like Stress Disorder, contaminated water sources, and due to the lack of agricultural prospects the importation of food from unknown origins may have contributed to the development of IBS.
Keywords: Irritable Bowel Syndrome, Quality of Life, Academic performance

Session Chair: Dr. Karwan Amin

Time	Code	Presenter	Title
2:15 PM	NCH06	Beriwan Abdulqadir Ali	Healthcare inequality in ocular clinics in Erbil city: a comparison study between private and public clinics

Healthcare inequality in ocular clinics in Erbil city: a comparison study between private and public clinics

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Abstract

Access to adequate health services that is of acceptable quality is important in the move towards universal health coverage. However, previous studies have revealed inequities in health care utilization in the favor of the rich. Further, those with the greatest need for health services are not getting a fair share. In Iraq, though equity in access is extolled in government documents, there is evidence suggesting that those needing health services are not receiving their fair share. This study sought therefore, to assess if socioeconomic related inequalities in public health service utilization in Iraq persist. A comparison survey was prepared and organized in Erbil city. Random patients were asked to fill the questioner, ranged between 18 to 60 years old. The questions were constructed depend on a comparison idea about both types of clinics which included public and private ocular clinics. Inequality was assessed using statistical analysis for all parameters. The results showed a significant variation between the private and public ocular clinics. First, majority of patients preferred the private sector because of the time they will spend in waiting lists. Second, 95% of the patients were happy and evaluated the welcome attitude and patient care as good. Third, answers of 408 patients were showed that expert and trained staffs are more occurring in the private sector. However generally more than half of the patients were finding the staff good. Forth, only few of people thought that the instruments of public sector were excellent. Whereas, more than 25% of the patients stated that the instruments used in the private sector are excellent. Fifth, most of the patients thought that the cost of the private clinics is very expensive and expensive respectfully. Sixth, the results showed that few majorities of patients attended private clinics were securing the payment through family support and 25% of them were earning such amount. It is of consideration that 12% of people were burrowing money to pay their costs. Finally, most of the patients though that the public clinics are extremely noisy. In conclusion, there is a large difference between private and public health ocular clinics in Erbil. However, the services in public ocular clinics are still good which is a good indicator of the general staff of public hospitals and clinics in Erbil despite of all the circumstances that the Kurdish government has faced. More research should be carried out in all health care services and particularly in ocular clinics for identification of diseases that can be transmitted through eye inspection instruments to the patients.
Keywords: Health inequality, ocular clinics, Erbil, Iraq.

Session Chair: Dr. Karwan Amin

Time	Code	Presenter	Title
2:30 PM	NCH07	Brisk H. Rashad	30-Days Mortality Rate in Patients with ST- segment elevation Myocardial Infarction in Duhok province

30-Days Mortality Rate in Patients with ST- segment elevation Myocardial Infarction in Duhok province

*Brisk Hayder Rashad 1 and Ameen Mosa 2

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Abstract

Background: ST segment elevation myocardial infarction (STEMI) is one of the top emergencies presenting to the medical emergencies and if left untreated properly it carries high mortality and morbidity specifically if associated with cardiovascular risk factors. The aim of this study is to address the 30-days mortality rate in STEMI and the associated risk factors in Duhok, Iraq.
Patients and methods: This was a prospective cohort study, single center, carried out in the emergency department and coronary care unit (CCU) of Azadi teaching hospital in Duhok Governorate, Kurdistan region, Iraq. The study was conducted between May 2016 and December 2016. 202 patients with acute STEMI were enrolled. A detailed medical history taking, thorough physical examination, 12 leads ECG, cardiac markers and analysis of receiving either reperfusion therapies (Thrombolytic) or primary PCI were recorded. Patients were followed up for 30 days for assessing the complication and mortality.
Results: The 30 days mortality rate among STEMI was 4.9%. The most prevalent cardiovascular risk factor was current smoking in (49%). Among dead cases hypertension and diabetes mellitus were the most prevalent risk factors. Most of the patients presented beyond the golden hours for reperfusion therapy. The mean duration of chief compliant of both typical and atypical symptoms of myocardial infarction was 520 minutes from onset of symptoms. PCI was done for 23.26% of patients within 30 days of follow up.
Conclusions: The 30 days mortality rate in this study is comparable to such a rate in neighboring countries. The timing of reperfusion therapies is commonly outside the golden time window. Cardiovascular risk factors are clustering in our patients.
Keywords: 30-Days Mortality Rate, ST- segment elevation Myocardial Infarction,

Session Chair: Dr. Karwan Amin

Time	Code	Presenter	Title
2:45 PM	NCH08	Nawfal R. Hussein	The Elimination of HCV in Duhok City: Five Years' Experience

The Elimination of HCV in Duhok City: Five Years' Experience

Nawfal R. Hussein 1 and *Brisk H. Rashad 1

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Abstract

Introduction: The World Health Organization (WHO) is aiming to eliminate HCV as a public health threat. WHO aims at the reductions of new transmissions of HCV, surveying and treating subjects with the infection. In Duhok, two strategies were utilized to combat the infection. First strategy included prevention of further infections and the second strategy composed of surveillance and treatment.
Objectives: The objective of this project was to discuss the 5 years' experience of surveillance and treatment of HCV in Duhok city, Kurdistan region, Iraq.
Materials and methods: Two strategies were utilized to screen the population. First, screening check points were setup to test different categories of people. The second strategy was achieved by urging people to screen for HCV antibodies in private and public labs. Anti-HCV antibodies was used to screen the recruited subjects. All positive subjects then tested by PCR to confirm the positivity. Then, HCV genotypes were determined. All patients with current HCV infection offered treatment with direct acting antivirus (DAA) containing regimens.
Results: During the study period, 459015/1423114 (32%) of Duhok population were tested for HCV positivity. Amongst those, 0.0029% (1350/459015) tested positive for anti-HCV antibodies. RT-PCR was performed for all positive samples. We found that, 0.000196% (90/459015) of our sample was positive by RT-PCR. It was found that 46.6% (42/90) of our samples were typed as HCV genotype 4, 45.5% (41/90) as genotype 1 and 7.7% (7/90) as genotype 3. All patients with current infection were offered treatment with DAA regimens. Sustained virologic response was achieved in all patients.
Conclusions: One third of Duhok population was tested for HCV. The incidence of the infection is very low. All patients with current HCV were treated successfully using DAA containing regimens. Low incidence of the infection with high treatment successful rate makes the elimination of the virus feasible.
Keywords: Elimination, Hepatitis C virus, Duhok

Session Chair: Dr. Amani Layth Hameed

Time	Code	Presenter	Title
3:00 PM	NCH11	Haitham Issa Albanna	Prevalence and Patterns of Use of Nutritional Supplements Among Gym Going Population

Prevalence and Patterns of Use of Nutritional Supplements Among Gym Going Population

Haitham Issa Albanna

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Abstract

Background and Objectives: Dietary supplement is a common practice among gym users with a desire to evaluate performance, training, exercise, recovery and health. Little is known about people performing strength training in Erbil city. The purpose of the study was to assess the prevalence of nutritional supplement intake including protein alone or in association with other supplements and the potential influencing factors among people exercising in gyms in Erbil city.
Methods: Crosses sectional study was done in 222 gym users, individual were chosen by convenience sampling. Information required to achieve the objectives was collected by face to face administered questionnaire which covered domains such as socio-demographic characteristic, type of gym activity, and type of exercise performed, reason for using supplement as well as source of information regarding supplements. Data analysis was performed using SPSS (version 23). Descriptive and inferential statistics were done through which supplement users were compared to the non-users and analyzed using Chi square test and P value to be statistically significant at ≤ 0.05.
Results: Majority being aged between 18-30 years old, with mean age (24.4 ± 6.1), male, institute/college students or graduates, students, high economic status with normal BMI. 59% of respondents were consuming dietary supplements, mainly proteins (79%) during their training as a belief it's the way to build muscles and gain strength. Majority of users 62.2% relied on gym instructors' advice for their intake, and this association was found to be highly statistically significant between supplement use & non-use only regarding gender, occupation and duration of gym attendance ($P<0.05$), while no significant association was found regarding age, BMI, education, socio-economic status (P value >0.05).
Conclusion: Supplement intake in people exercising is high and is usually prescribed to them by their gym trainers. An appropriate dissemination of accurate and scientifically found information regarding benefit & side effects of nutritional supplement is highly recommended in the sport environment and to be done under the supervision of a specialist (physician or nutritionists).
Keywords: Supplement, gym, exercise, performance

Session Chair: Dr. Amani Layth Hameed

Time	Code	Presenter	Title
3:15 PM	NCH12	Shalaw Fris Ahmed	Prevalence of needle stick and sharp injuries among different genders at a surgical specialist hospital-cardiac center in Erbil city: A cross-sectional study

Prevalence of needle stick and sharp injuries among different genders at a surgical specialist hospital-cardiac center in Erbil city: A cross-sectional study

*Shalaw Fris Ahmed 1, Jamal Shakor 2, Titi Rahmawati Hamedon 3, and Dlovan M.F.Jalal 4

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Abstract

Background: Needle-stick and sharp injuries NSSIs pose a serious problem and a major risk of work-related transmitted diseases among healthcare employees (HCEs) in developing and developed countries. The extent of NSI in the Kurdistan region / Iraq hospitals has been unknown. The factors related to NSIs among healthcare workers were evaluated in the present study. The main purpose of this study is to determine the prevalence of NSI and its associated factors among the respondents.
Methods and subject: The cross-sectional study design was used to determine the proportion of NSSI and its associated factors. This study was conducted on 150 randomly selected healthcare staff with a working experience of at least 1 year in the hospital. The study location is a surgical specialist hospital-cardiac center, situated in Erbil/Iraq. The self-administered questionnaire was used to collect information on socio-demographic, employment and individual characteristics, as well as data on needle stick and sharp injuries, suffered in the past 12 months.
Results: The majority of participants (34%) were in the 30 to 35-year age group. Most were male (60.7%), married (61.3%), have at least degree qualification (89%). The prevalence of NSSI was 67%. Needle stick was the main frequent of NSSRs (66%). Needle recap was all the time done among health workers 104 (69%), they almost use both hands for recap 136 (91%). Education, working environment satisfaction, sleeping quality of the health staff have been considered the main indicators of NSSI.
Conclusion: The rate of NSSI was considered high in this study compared to the rates in many developing countries. Arrangement schedules for work and sleeping of staff could decrease the NSSI rate.
Keywords: Needle-stick and sharp injuries, risk factors, Medical staff, Erbil city

Session Chair: Dr. Amani Layth Hameed

Time	Code	Presenter	Title
3:45 PM	NCH13	Surkew L. Mahmud	Risk stratification, clinical events and in hospital mortality in patients with acute coronary syndrome admitted to coronary care unit of Sulaymaniyah cardiac hospital

Risk stratification, clinical events and in hospital mortality in patients with acute coronary syndrome admitted to coronary care unit of Sulaymaniyah cardiac hospital

Surkew L. Mahmud 1, Mudhafar A. Barzani 2

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Abstract

Background: Acute coronary syndrome refers to a clinical spectrum, encompasses three different categories; ST-elevation myocardial infarction, non-ST-elevation myocardial infarction and unstable angina. Management strategies based on the estimation of risk stratifications, adverse clinical events and in-hospital mortality had not been evaluated before in Sulaymaniyah-Iraq. Objective: In this case review study we aim to; determine clinical risk profiles attributing to the development of ACS, demonstrate clinical cardiac and non-cardiac events and determine the predictive values of different clinical variables on cardiac events.
Methods: Patients with a clinical diagnosis of ACS were enrolled in the study over a 12-month period in Sulaymaniyah Cardiac Hospital. All patients underwent complete history and physical examination. Electrocardiographic and echocardiographic examinations were done within hospital arrival and admission. Blood samples were taken to measure serum cardiac troponin, renal function test, complete blood count and random blood sugar. Based on clinical features, ECG changes and serum cardiac troponin; patients were classified into STEMI, NSTEMI and UA. GRACE risk scores were calculated for all patients; accordingly, patients were stratified into low, intermediate and high risk for in-hospital death. Management modalities, clinical cardiac and non-cardiac events and in-hospital death were all recorded.
Results: Among 333 patients in the study, 247 (74.2%) were male and 86 (25.8%) were female, the (mean age ± SD) was 60.1 ± 10.6 years and their ages range between 18-95 years. Overall in-hospital mortality was 5.1%. STEMI had comprised the most common form of ACS, followed by UA and then NSTEMI. In the studied ACS-patients primary and rescue PCI (Percutaneous Coronary Intervention) were performed in 165(49.5%) of cases, diagnostic only conventional angiography was performed in 15 (4.5%) of cases, fibrinolytic therapy was given in 22 (6.6%) of patients, medical only treatment without reperfusion therapy was given in 146 (43.8%) of cases. The odds ratio of different clinical variables for in-hospital mortality and cardiac events in the study were: 30.98 for GRACE risk score >5%, 3.3 for diabetes mellitus, 2.45 for LVEF% <40,2.8 for serum creatinine >1.4 mg/dl, 2.1 for positive serum cardiac troponin, 1.86 for body mass index >30 kg/m 2 , 1.81 for heart rate >100 beats/min., 1.49 for systolic hypertension, 11.57 for STEMI, 6.13 for NSTEMI, 1.2 for UA, 0.34 for age <65 years, 0.79 for PPCI, 0.93 for fibrinolytic therapy, 1.95 for medical only therapy without reperfusion. P value was significant (<0.05) for diabetes mellitus, s. creatinine >1.4 mg/dl, positive serum cardiac troponin, LVEF%<40, age <65 years, and highly significant (<0.001) for GRACE risk score >5%.
Conclusion: Management of UA/NSTEMI patients requires early risk stratifications. High-risk patients should undergo an early invasive strategy that consists in performance of cardiac catheterization in the first 24 to 48 hours of presentation. High GRACE risk score >5%, diabetes mellitus, renal impairment, positive serum cardiac troponin, LVEF% <40 are significantly correlated with in-hospital mortality and adverse clinical cardiac events.

Keywords: Risk stratification, acute coronary syndrome, cardiac and non-cardiac events, in-hospital mortality.

Session Chair: Dr. Amani Layth Hameed

Time	Code	Presenter	Title
4:00 PM	NCH14	Sangar Muhammad Ahmed	Effect of Low Carbohydrate Diet Compared to Low Fat Diet in Reversing the Metabolic Syndrome Using IDF Criteria

The Elimination of HCV in Duhok City: Five Years' Experience

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Abstract

Introduction: The World Health Organization (WHO) is aiming to eliminate HCV as a public health threat. WHO aims at the reductions of new transmissions of HCV, surveying and treating subjects with the infection. In Duhok, two strategies were utilized to combat the infection. First strategy included prevention of further infections and the second strategy composed of surveillance and treatment.
Objectives: The objective of this project was to discuss the 5 years' experience of surveillance and treatment of HCV in Duhok city, Kurdistan region, Iraq.
Materials and methods: Two strategies were utilized to screen the population. First, screening check points were setup to test different categories of people. The second strategy was achieved by urging people to screen for HCV antibodies in private and public labs. Anti-HCV antibodies was used to screen the recruited subjects. All positive subjects then tested by PCR to confirm the positivity. Then, HCV genotypes were determined. All patients with current HCV infection offered treatment with direct acting antivirus (DAA) containing regimens.
Results: During the study period, 459015/1423114 (32%) of Duhok population were tested for HCV positivity. Amongst those, 0.0029% (1350/459015) tested positive for anti-HCV antibodies. RT-PCR was performed for all positive samples. We found that, 0.000196% (90/459015) of our sample was positive by RT-PCR. It was found that 46.6% (42/90) of our samples were typed as HCV genotype 4, 45.5% (41/90) as genotype 1 and 7.7% (7/90) as genotype 3. All patients with current infection were offered treatment with DAA regimens. Sustained virologic response was achieved in all patients.
Conclusions: One third of Duhok population was tested for HCV. The incidence of the infection is very low. All patients with current HCV were treated successfully using DAA containing regimens. Low incidence of the infection with high treatment successful rate makes the elimination of the virus feasible.
Keywords: Elimination, Hepatitis C virus, Duhok

Session Chair: Asst. Prof. Shukir Saleem Hasan

Time	Code	Presenter	Title
4:15 PM	NCH16	Nasir Al-Allawi	Prevalence and molecular characterization of Glucose-6-Phosphate dehydrogenase deficient variants among the Kurdish population of Northern Iraq

Prevalence and molecular characterization of Glucose-6-Phosphate dehydrogenase deficient variants among the Kurdish population of Northern Iraq

Nasir Al-Allawi 1, Adil A Eissa 1, Jaladet MS Jubrael 2, Shakir AR Jamal 1, and Hanan Hamamy 3

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Abstract

Background: Glucose-6-Phosphate dehydrogenase (G6PD) is a key enzyme of the pentose monophosphate pathway, and its deficiency is the most common inherited enzymopathy worldwide. G6PD deficiency is common among Iraqis, including those of the Kurdish ethnic group, however no study of significance has ever addressed the molecular basis of this disorder in this population. The aim of this study is to determine the prevalence of this enzymopathy and its molecular basis among Iraqi Kurds.
Methods: A total of 580 healthy male Kurdish Iraqis randomly selected from a main regional premarital screening center in Northern Iraq were screened for G6PD deficiency using methemoglobin reduction test. The results were confirmed by quantitative enzyme assay for the cases that showed G6PD deficiency. DNA analysis was performed on115 G6PD deficient subjects, 50 from the premarital screening group and 65 unrelated Kurdish male patients with documented acute hemolytic episodes due to G6PD deficiency. Analysis was performed using polymerase chain reaction/restriction fragment length polymorphism for five deficient molecular variants, namely G6PD Mediterranean (563 C→T), G6PD Chatham (1003 G→A), G6PD A- (202 G→A), G6PD Aures (143 T→C) and G6PD Cosenza (1376 G→C), as well as the silent 1311 (C→T) mutation.
Results: Among 580 random Iraqi male Kurds, 63 (10.9%) had documented G6PD deficiency. Molecular studies performed on a total of 115 G6PD deficient males revealed that 101 (87.8%) had the G6PD Mediterranean variant and 10 (8.7%) had the G6PD Chatham variant. No cases of G6PD A-, G6PD Aures or G6PD Cosenza were identified, leaving 4cases (3.5%) uncharacterized. Further molecular screening revealed that the silent mutation 1311 was present in 93/95 of the Mediterranean and 1/10 of the Chatham cases.
Conclusions: The current study revealed a high prevalence of G6PD deficiency among Iraqi Kurdish population of Northern Iraq with most cases being due to the G6PD Mediterranean and Chatham variants. These results are similar to those reported from neighboring Iran and Turkey and to lesser extent other Mediterranean countries.
Keywords: G6PD deficiency, molecular characterization, Kurdish population, G6PD variants.

Session Chair: Asst. Prof. Shukir Saleem Hasan

Time	Code	Presenter	Title
4:30 PM	NCH18	Mohammad Hasan Ali	Thyroid function abnormality in type 2 diabetes among Iraqi population

Thyroid function abnormality in type 2 diabetes among Iraqi population

Mohammad Hasan Ali

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Abstract

Background: Type 2 Diabetes mellitus (DM) and thyroid dysfunction (TD) a common endocrine metabolic disorder, is an important cause of morbidity and mortality worldwide. Patients with diabetes have a higher prevalence of thyroid disorders when compared with general population. Alteration in thyroid function complicates the management of DM and its complications.
Aim of study: The aim of the present study was to find the prevalence of thyroid dysfunction in subjects with type 2 diabetes mellitus.Materials and Methods: A cross sectional study was conducted from October 2018 to January 2019 at the specialized center for endocrinology and Diabetes. 220 patients with known Type 2 DM or newly detected cases were included and compared with 60 apparently healthy groups in this study. All the patients were evaluated for thyroid dysfunction by analyze thyroid parameters (triiodothyronine, thyroxine, and thyroid-stimulating hormone. The correlation of prevalence of thyroid disorder with gender distribution, age distribution, hemoglobin A1C, duration of diabetes, family history of diabetes, body mass index, usage of oral antiglycemic agents and insulin, and thyroxin for hypothyroid and Neomecazol for hyperthyroid patients. The observations and interpretations were recorded, and results obtained were statistically analyzed.
Results: In current study, age of the patient ranges from 30 to 70 years. In our study, 26.35% of the patients with Type 2 DM had abnormal thyroid parameters. The most common abnormality was hypothyroidism (19.54%) followed by hyperthyroidism (6.8%) compared by 162 euthyroid subjects. The prevalence of thyroid abnormality is more common in females was (19.44%) than in males was (6.86%) which was recorded significant Pvalue<0.05. The present study showed a significant correlation between abnormal thyroid parameters and BMI recorded pvalue <0.05. A non-significant correlation between thyroid hormones duration of diabetes estimated Pvalue >0.05 in T2DM compared to control groups.
Conclusion: Thyroid disorder is higher prevalence and can happen in type 2 diabetic patients this indicates that type 2 diabetes should be routinely checked for thyroid dysfunction.
Keyword: Thyroid disorder, type 2 diabetes mellitus, Control groups.

Session Chair: Asst. Prof. Shukir Saleem Hasan

Time	Code	Presenter	Title
4:45 PM	NCH19	Dr. Kazhan Mahmood	Kurdish women's labor and birth experiences

Kurdish women's labor and birth experiences

*Dr. Mahmood KI 1, Dr. Blackett T 2, and Prof. Peat A 2

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Abstract

Introduction: Childbirth experience is considered an essential issue for health policy makers in developed countries, but Kurdish women's childbirth experience has received little attention.
Purpose: To assess Kurdish women's labor and birth experience, identifying their awareness of, and desire for, labor pain relief.
Design and Methods: A quantitative survey was conducted with 256 women who gave birth in a major hospital in Iraqi Kurdistan. The 'Childbirth Experience Questionnaire' was used with some modifications for generating quantitative data on women who have recently undergone labor and birth at the time of the data collection period. The questionnaire study was conducted in the postpartum care unit, as women referred there, after giving birth are in a more stable condition and better able to reply to the researcher's questions.
Findings: The mean age of the study sample was 26.39. Most (69.2%) of the study sample were multiparous. 43.8% gave birth by vaginal delivery assisted by episiotomy. Most of the women were dissatisfied with their overall labor and birth experience. Although 70.7% of women felt they did not have control during their childbirth, the majority (85.2%) of them did feel secure. Women graded their childbirth as painful and most were unaware of labor pain relief options but wanted pain relief for any future birth. Antenatal visits had no effect on women's preparedness. The perceived safety of those women who lived in urban areas is significantly higher than those who lived in rural areas since the p-value equals 0.035 (95% CI 0.02-0.45). Furthermore, those women who had no schooling experience had a higher perceived safety than those who graduated from institutions or universities p= 0.008 (95% CI 0.08-0.49).The odds of being aware of pain relief options of those women who did not go to school are 81.3% lower than women with degrees p= 0.001 (95% CI 0.07-0.51). In addition, the odds of pain relief awareness for women in the schooling group are 0.259 times the odds for women with a degree. This means they are less likely to be aware (p= 0.001, 95% CI 0.11-0.59).
Conclusion: Several factors negatively affecting the childbirth experience need to be addressed, whilst positive factors should be reinforced. Antenatal preparation of women for childbirth and a labor pain management policy are necessary.
Keywords: Labor, Birth, Childbirth, Pain Relief

Session Chair: Dr. Javed Ahmad

Time	Code	Presenter	Title
11:15 AM	PH02	Muhammad A. Ahmed	Role of hypoxia and hypoxia mimetic agents in mitochondria dysfunction

Role of hypoxia and hypoxia mimetic agents in mitochondria dysfunction

*Muhammad A. Ahmed 1, Rouli Chen 2, and Nickolas R. Forsyth 2

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Abstract

Pheochromocytoma of the rat adrenal medulla (PC12 cells). The embryonic origin of this cell is the neural crest. These cells are highly sensitive to the changes O2 which have crucial role in cell biology thus it is considered the best model to study the effect of hypoxia on neurons. For long time these cells grow in oxygen level which is much higher than its original physiological niche. Recapitulation of this niche in vitro will give us the exact cell behavior in its natural environment. Chemical induced hypoxia convenient alternative main to engineered hypoxia environments. In this study we what to examine if PC12 treatment with hypoxia mimetic agents (HMAs) in normoxia have follow the same biological pattern of physiological environment of these cells; using cell proliferation, metabolic activity (MTT), differentiation, apoptosis, mitochondrial action potential and mitochondrial genome copy number, In addition toHIF-1α and HIF-2α. The results show that pc12 proliferation, metabolic activity and action potential were significantly inhibited after treatment with HMAs in normoxia ($p<0.05$). HMAs significantly elevated the apoptotic index after the treatment in normoxia ($p<0.05$) and both ROS formation and nitroreductase activity after 96h (no change in ROS formation and nitroreductase over 24, 48, and 72h). Mitochondrial genome copy number show significant increase after treatment with HMAs in normoxia. Both HIF1α and HIF2 α show significant increase over 96h of treatment at 21% oxygen. In conclusions; HMAs induces production of immature mitochondria in PC12 cells.
Keywords: hypoxia mimetic agents, hypoxia, PC12.

Session Chair: Dr. Javed Ahmad

Time	Code	Presenter	Title
11:30 AM	PH04	Suhad Faisal Hatem Al-Mugdadi	The Effect of Boswellia Carterii on Monocyte Chemoattractant Protein-1(MCP1) Immune marker in Diabetic Patients

The Effect of Boswellia Carterii on Monocyte Chemoattractant Protein- 1(MCP1) Immune marker in Diabetic Patients

*Suhad Faisal Hatem Al-Mugdadi 1, Huda Jaber Waheed1, & Ibrahim S. Aljubory 2

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Abstract

Objective: Diabetes mellitus (DM) commonly called to as diabetes is a set of metabolic disorders in which there are high blood sugar levels over a prolonged time. Diabetes is due to either the pancreas not producing enough insulin, or the cells of the body not responding properly to the insulin Boswellia Carterii is one of the most powerful natural inflammatory agents, antioxidants making it a natural tonic for the body's immune system.
Aim: Evaluate and estimate the effect of natural product called Boswellia Carterii on Monocyte chemoattractant protein 1(MCP1) immune marker, HbA1c and FBS in diabetes patients after and before one month of treatment
Materials and Method: In this study the total of 25 patient suffering from diabetic mellitus type 2 was submitted to this study with age range 40-67 years in addition to another 25 cases from healthy persons used as control. The patients took 600 mg from Boswellia carterii once daily for one month as capsule. Blood samples of Diabetic patients take to measuring the FBS by reflotron, HbA1c by kit and MCP-1 by ELIZA.
Results: HbA1c & FBG decreased significantly (**P<0.01) after treatment with Boswellia Carterii compared to normal cases,while no change on MCP1level was observed after one month of treatment . In addition, there were significant correlation between MCP-1 and FBG * (P<0.05) and between FBG and HbA1c ** (P<0.01).
Conclusion: Boswellia Carterii good therapy to reduce glucose and, HbA1c level in diabetes but not MCP-1. This lead to give idea about the dose which gave to the DM patients in this study (600mg/ one dose daily) was low to effect on cytokines.
Keywords: diabetic mellitus, Boswellia Carterii, Monocyte chemoattractant protein 1(MCP1)

Session Chair: Dr. Javed Ahmad

Time	Code	Presenter	Title
11:45 AM	PH05	Dr. Ghada AL-Ouda	Activity of Zinc Oral Dispersible Tablet on Marjory Clinical Type of Recurrent Aphthous Stomatitis Ulceration, a Clinical Trial Human study

Activity of Zinc Oral Dispersible Tablet on Marjory Clinical Type of Recurrent Aphthous Stomatitis Ulceration, a Clinical Trial Human study

Dr. Ghada AL-Ouda

Al-Mustaqbel University College Pharmacy

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Abstract

Oral recurrent aphthous stomatitis is the most common disease of the oral cavity. The underlying etiology remains unclear, and no curative treatment is available. Zinc is essential and useful for normal growth and tissue repair, zinc acts as an integral part of several enzymes important to protein and carbohydrate metabolism. The present study aimed to use systemic drug used zinc oral dispersible tablet (20mg). Illnesses related to the oral cavity by studying its effects in oral recurrent aphthous stomatitis major clinical type (ORAS), this systemic therapy is not indicated in such situations among other drugs.
Subjects, materials and methods: In this study patients presented with (ORAS) ulceration lesions were treated with zinc oral dispersible tablet (20mg) administered orally once daily after meal. The dispersible tablet was administered orally once daily for 14 days, 52 patients (36 males and 16 females aged between 28-30) with biopsy-confirmed aphthous ulceration of the lesions area, divided into two groups; group A, 28 patients were randomly assigned to receive zinc oral dispersible tablet, 20 mg/day once per day, and group B; 24 patients with oral placebo daily for 14 days.
Results: The results showed that administering of zinc oral dispersible tablet once per day accelerated the healing process within a short time period (8 days) without complications or disfigurement in all patients. Group A, 22 patients, (the healing rate were 0.66%) of 28 patients were used zinc oral dispersible tablet (20mg) doses administered orally had complete healing of aphthous ulcers at period time eight days of clinical investigation evaluation and weight increase rate by 0.32% kg during the time period of the study, compared with group B, only 8 patients (the healing rate were 0.21%) of 24 placebo-randomized patients eating ability caused by oral cavity aphthous ulceration were improved markedly and had a weight loss rate by 0.53% kg.
Conclusion: In this study showed that, the zinc oral dispersible tablet treatment was effective in healing of the major type aphthous ulceration and the end-points of the study were complete healing and absence of any discomfort pain while eating within a short period of treatment.
Keywords: Zinc, Recurrent aphthous stomatitis, treatment, clinical management, zinc oral dispersible tablet.

Session Chair: Dr. Renuar Fadhil

Time	Code	Presenter	Title
2:00 PM	DEN03	Dr. Ali Waad	Augmentation of Surgically Created Bony Defects Using Biphasic Calcium Phosphate with and without Platelet Rich Fibrin: An Experimental Study in Sheep

Augmentation of Surgically Created Bony Defects Using Biphasic Calcium Phosphate with and without Platelet Rich Fibrin: An Experimental Study in Sheep

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Abstract
Background: The reconstruction of large bony defects is one of great challenge in clinical research, various materials and techniques were used in tissue engineering. Recently, autologous platelet rich fibrin (PRF) which contain various growth factors, accelerate tissue healing and promotes bone regeneration. Therefore, this study aimed to evaluate the effectiveness of adding PRF to biphasic calcium phosphate (BCP) on healing process of iliac bone defects in sheep.
Methods: A 6 iliac defect bone 8mm in diameters and depth were created in each side of 4 sheep. The first 2 defects were filled with blood as control group, the second 2 defects were filled with BCP as group A and the last 2 defects were filled with a mixture of BCP and PRF equally as group B. One sheep was sacrificed at 2, 4, 6 and 12 postoperatively weeks, and 12 iliac defects from each period were histologically analyzed for new bone formation, inflammation and proportion of woven to lamellar bone using hematoxylin and eosin stain.
Results: The study showed that the level of inflammation was decreased in control group from 2 to 12 weeks (P=0.019) in contrast with group A (BCP) and group B (BCP and PRF) (P=0.121 and P=0.138, respectively). Similarly, the percentage of woven and lamellar bone in controls and B groups were decreased and increased significantly, respectively. Besides the percentages of new bone formation (osteoid) in both study groups A and B were significantly increased over time with a more increase in group B (BCP and PRF) ($P<0.05$). Importantly, the study showed that the group B (BCP and PRF) had statistically significant increase in the percentage of lamellar bone and osteoid compared to the BCP and control groups in 12 weeks.
Conclusion: The present study revealed a histologic increase in bone formation with the addition of PRF to BCP in surgically created defects in iliac bone of sheep.
Key words: biphasic calcium phosphate, platelet-rich fibrin, growth factors, bone healing process.
Abbreviation: (BCP) biphasic calcium phosphate.
(PRF) platelet rich fibrin.

Session Chair: Dr. Renuar Fadhil

Time	Code	Presenter	Title
2:15 PM	DEN04	Dr Anas Hussien Yousif	Cyclic fatigue and centering ability of different single file systems

Cyclic fatigue and centering ability of different single file systems

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Abstract

Aim: The aim of the present study was to compare the cyclic fatigue resistances of WaveOne Gold (WOG), Reciproc Blue (RB), and 2Shape (2SH) NiTi systems having different metallurgic properties.
Methods: A total of 60 Instruments of WOG, RB, and 2SH instruments used, 20 of each files, six group are formed (n=10), All instruments were rotated/reciprocate inside two artificial canals (static state) which were made of stainless steel ,the two canals are 20 mm in length with an inner diameter of 1.5 mm , a tip of 0.40 mm and 0.09 taper. Canal 1 45° degree and 8-mm radius, canal 2 angle of 45° degree and 5-mm radius, until fracture occurred at room temperature 25C, the time to fracture (TTF) was recorded in seconds using a digital chronometer Also, number of cycles to fracture was calculated (NCF) and the lengths of the fractured fragments were recorded. data were analyzed by using SPSS (Statistical Package for Social Service) by version 18for windows the mean difference is significant at 0.05 level.
Results: When comparing the time of fracture of all the instruments tested in the artificial canal with 45° Radius 8 mm curvature, RB had statistically the highest cyclic fatigue resistance followed by WOG and 2SH showed the lowest cyclic fatigue resistance .and the number of cycle to fracture showed no significant difference between RB and WOG,and 2SH is less resistance to fracture. In artificial canal with45° and 5mm radius curvature, there was no significant difference between RB and WOG when compared by TTF and NCF while 2SH had less cyclic fatigue resistance. There was no significant difference in the mean length of the fractured fragments among the instruments.
Conclusion: Within the limitations of the present study, RB NiTi files showed statistically higher cyclic fatigue resistance in artificial canals with 45° radius 8 mm, and no significant between RB and WOG in artificial canals with 45° radius 5 mm, and 2SH showed lowest cyclic fatigue resistance when compared to RB and WOG, no significant difference in fracture length among all groups.
Keywords: Cyclic fatigue, WaveOne gold, Reciproc blue, 2Shape

Session Chair: Dr. Duran Kala

Time	Code	Presenter	Title
2:30 PM	DEN05	Heba Kazhaal Mahmood	Association between Anti-CMV IgG and Salivary Levels of IL-6 and TNF-α in Chronic Periodontitis

Association between Anti-CMV IgG and Salivary Levels of IL-6 and TNF-α in Chronic Periodontitis

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Abstract

Background: Periodontitis is a disease attributable to multiple infectious agents and interconnected cellular and humoral host immune responses. Recent reports have indicated that HCMV may contribute in pathogenesis of periodontitis. The HCMV can stimulate the release of cytokines from inflammatory and non-inflammatory cells and impair the periodontal immune defense.
Aims of Study: This study was performed to detect the presence of anti- CMV IgG, as well to determine the levels of IL-6 and TNF-α and to correlate the presence of virus with cytokines levels.
Materials and Methods: Forty patients with chronic periodontitis and 40 healthy volunteers their ages and sexes were matched with the patients were participated in this study. Periodontal parameters used in present study include PLI, GI, PPD, CAL and BOP. Saliva samples were taken from all subjects. ELISA was carried out to estimate the levels of anti-CMV IgG, IL-6 and TNF-α.
Results: This study revealed that there is significant difference ($p<0.05$) in the frequency of anti-CMV IgG in saliva between patients and controls. The number and percentage of patients group who had positive for anti-CMV IgG was 14 (35%), while controls were 5 (12.5%). This study found significant increase in mean of PPD, CAL and BOP among patients with the positive IgG as compared to those patients with the negative IgG. In addition, there is significant elevation in the median levels of IL-6 and TNF-α in patients than in controls. IL-6 is significantly associated with GI and BOP, whereas TNF-α was significantly associated with PPD and CAL. On the other hand, there is significant association between TNF-α and anti- CMV IgG.
Conclusion: The findings revealed that the significant correlation between the presence of virus with periodontal parameters and cytokines level in patients group gives additional evidence toward the potential importance of the direct and indirect effects of CMV infection in periodontitis.
Keywords: periodontitis, HCMV, anti- CMV IgG, cytokines.

Session Chair: Dr. Duran Kala

Time	Code	Presenter	Title
2:45 PM	DEN06	Sabrya Najeeb Ibraheem	Molecular and immunohistochemical study of human dental pulp tissue response of caries teeth

Molecular and immunohistochemical study of human dental pulp tissue response of caries teeth.

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Abstract

Polymerase chain reaction (PCR) is basically a specific DNA amplification technique mostly applied for molecular and diagnosis genetic because of its high sensitivity and specificity. The technology of PCR act as a key to molecular biology has realized that the qualitative detection of absolute quantitative has been changed. It has many new different new PCR technologies, such as photonic PCR, extreme PCR, o- amplification at the lower denaturation temperature PCR, nanoparticle PCR, and others. Transforming growth factor-beta 1 (TGF-b1) plays a significant role in wound healing and increases local angiogenesis and blood vessel permeability mainly in caries-induced pulpitis. To date, there are no studies evaluating the expression level of TGF-b1 in pulp tissues from carious teeth.
Objectives: Evaluate the presence of TGF-b1 in the pulp of carious teeth as compared to that without caries lesion, as well as the expression of PAR in compare to mRNA level in these teeth.
Method: Seventy-five extracted teeth with pulp tissue were collected. Teeth with caries lesion were grouped as deep caries and shallow caries. The pulp tissue samples exacerbated and stored as paraffin-embedded blocks. Sections of 4µm of pulp tissue samples from formalin-fixed paraffin-embedded blocks (FFPE) were obtained. RNA was extracted, cDNA synthesized and TGF-b1 expression measured using, the real-time quantitative reverse transcriptase-polymerase chain reaction (RT-PCR).
Results: Among the dental caries group, 23.15% (n=25) were shallow caries and 76.85% (n=83) were deep caries. PAR2 was significantly higher in caries teeth, but a large percentage was negative for PAR2 in deep caries (47.2%) and even larger in exposed pulp tissue (51.8%). The analysis of TGF-b1 expression level by RT-PCR showed a statistically significant difference when comparing TGF-b1 expression in non-caries to caries samples, with highly significant differences obtained between shallow and deep caries.
Conclusion: Observing high PAR2 and TGF-b1 expression level in caries samples, with lower expression results in f non-caries samples, needs further studies, as it may reflect the supporting role of TGF-b1 and PAR in the repair process of caries teeth at different caries depth and assist in improving the therapeutic action of exogenous growth factors under restorative materials to increase the secretory production of tertiary dentine by the action of the differentiated odontoblastic like cells.
Keywords: Dental caries, Dental pulp tissue, Protease activating receptor, and transforming growth factor-beta 1.

Immunophenotyping of Diffuse Large B-Cell Lymphoma in Duhok Province-Iraq

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Abstract

Background: Diffuse large B-cell lymphoma (DLBCL) constitutes a predominant disease throughout the world and it is comprised of a heterogeneous group of aggressive lymphomas. Recently, few studies succeeded in assigning this specific entity into prognostic subgroups. This study was proposed to categorize DLBCL based on morphology, primary site and immunophenotyping in the Duhok region.
Materials and Methods: This study includes retrospective analysis of seventy cases of DLBCL diagnosed at the Central Public Health Laboratory, Pathology Department, Duhok, Kurdistan region from December 2009 to August 2013. The analysis includes morphology, primary site of disease & immunophenotyping where a selected panel of monoclonal antibodies was applied on each case. The panel comprised of CD30, CD10, BCL2, Ki67, BCL6, and multiple myeloma-1/ interferon regulatory factor-4 (MUM-1/IRF4). Hans and co-worker's algorithm was used used to classify cases into germinal centre B-cell (GCB), and non-germinal center B-cell (nGCB) DLBCL.
Results: Of the 70 cases of DLBCL, 61% were males and 39% were females with median age of 55 years old. 64% percent of cases were nodal and 36% of cases were extra nodal primary sites. There were 43cases (61%) of the nGCB/ABC group while 27 cases (39%) were of the GCB group. Four immunophenotyping categories were determined according to the proposed algorithm. 12 cases were germinal center CD10 + (GC; CD10+, BCL6+/-, MUM-), 15 cases were germinal center CD10- (GC; CD10-, BCL6+, MUM-), 30 cases were post germinal center MUM+ (pGC; CD10-, BCL6+/-, MUM+), 13 cases were post germinal center MUM- (pGC; CD10-, BCL6-, MUM). Single antigen expression was detected as follows: 12 cases expressed CD10, 23 cases expressed BCL6, 30 cases showed MUM/IRF4, 53 cases stained for BCL2, 49 cases expressed Ki67 & 19 cases expressed CD30. In the nodal DLBCLs we found that BCL2 almost showed high expression in both GC and ABC subgroups.
Conclusion: In the current study there was a high frequency of unfavorable prognostic markers that includes predominance of nGC/ABC DLBCL, activation makers (IRF4/MUM1), oncosuppressor (BCL2) and proliferation index (Ki67) expression in DLBCL cases.
Keywords: Immunophenotyping, B-Cell Lymphoma, Duhok Province, Iraq

Serum Calcium and Phosphate in Beta Thalassemia Major Children

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Abstract

Background: Hypoparathyroidism is well known to occur in thalassemia major patients as a result of iron overload, but it is thought to be uncommon. Hypoparathyroidism in turn is known to cause hypocalcaemia, high phosphorous levels. Despite chelation therapy has complications of iron overload remain common.
Objectives: To estimate the serum Ca and Po4 levels of β-thalassemia major patients who are receiving regular blood transfusions with or without chelation therapy and compare to control group.
Materials and Methods: This prospective case control study was conducted at Jin Pediatric Hematology and Oncology Center at Duhok City from 1st of January 2014 to the 1st of September 2014. Fifty patients with 50 age and gender matched controls were included. Two ml of venous blood used calcium and phosphate level analyzed.
Results: 21 of patients were male and 29 were females, 70% under the age of 10 years, 26 of controls were male and 24 were females, 72% under the age of 10 years. Mean serum Po4 of patients was significantly high [39 cases (78%)], (p=0.001) and was no statistically significant difference between s.Ca of patients and controls only 2(4%) of patients had hypocalcaemia and 48 (96%) of them had normal s.Ca, (p=0.5). There was no relation between mean serum Ca, Po4 levels and duration of the disease, type of chelation therapy or the serum ferritin of thalassemia patient.
Conclusions: patients with β-thalassemia major have high serum level of phosphate which is attributed to iron overload. No relation was found between serum phosphate, serum calcium and other factors including: duration of disease, type of chelation therapy and serum ferritin.
Keywords: Serum Calcium, Phosphate, Beta Thalassemia, Children

PIK3Ca Mutation Detection in Iraqi Breast Cancer Patients

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Abstract

The breast cancer occupied the forefront among the cancers in Iraq depending on the Iraqi Cancer Committee statistics along the last ten years and the causative agents for this related to the genetic disorder. PIK3Ca oncogene mutation plays an important role in breast cancer incidence. This study aimed to assess the genetic aberrations in Iraq breast cancer patients for specific hot spots in exons 9 and 20 that belong to the PIK3Ca gene by using High-Resolution Melt analysis. DNA extracted from the Paraffin-embedded blocks (FFPE), (22) samples were for the diagnosed breast cancer patients and (17) diagnosed as benign tumors (fibroadenoma) as control. The results of mutation for the PIK3Ca revealed that there were differences between the patient's group by detected mutations in (4.55%) for both hot spots in exons 9 (g. 1635G>A E455K) and 20 (c. 3237C>T. A1026V), whereas no mutation detected in the benign tumors. We conclude that the genetic aberrations in PIK3Ca correlated with the Incidence of breast cancer in Iraq and deeper studies concerning the PIK3Ca mutations were recommended and it's alignment with other genetic aberrations.
Keywords: Breast Cancer, Mutation, High-Resolution Melt (HRM), PIK3Ca

Seroprevalence of Rubella Virus and Herpes Simplex Virus in Pregnant Women in Zakho City, Kurdistan Region, Iraq

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Abstract

Primary infection with rubella and herpes virus may lead to serious consequences in pregnant women including abortion, stillbirth, and severe birth defect. The aim of the study is to determine the prevalence of rubella and herpes IgG and IgM antibodies in pregnant women. A total of 200 pregnant women with history of abortion were comprised in the present study and the mean age was between 16-45 years old. Samples were collected between January 2015 and December 2018. All samples were tested by Enzyme Linked Fluorescent Assay (ELFA) for rubella and herpes specific IgG and IgM classes of antibodies. Of the total study participants, 142 (71%) were seropositive for anti-rubella IgG antibodies, which indicates previous immunization, while 3 (1.5%) were positive for anti-rubella IgM antibodies, which indicates acute/recent infection. In addition, seroprevalence of IgG and IgM antibodies to Herpes simplex virus was 131 (65.5%) and 9 (4.5%) respectively. In terms of age, high seropositivity of specific IgG and IgM antibodies to both infections was found in age less than 30 years old. In conclusion, this study has presented pilot data on Rubella and Herpes viruses infections among pregnant women in Zakho city, Kurdistan, Iraq. Because of the high seropositivity of rubella and herpes virus infections in pregnant women, preventive and other appropriate measures should be taken in the studied area.
Keywords: Seroprevalence, Rubella, Herpes, pregnant women, Zakho, Kurdistan Region, Iraq

Nasal carriage of staph aureus and antimicrobial susceptibility pattern among secondary school students in Duhok City, Kurdistan Region, Iraq

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Abstract

Staph aureus is a common commensal bacteria of the human body and a potential pathogen causing public health hazards. Owning various virulent factors and rising antibiotics resistance, the bacteria can cause different infections ranging from minor skin infections to life-threating sepsis. The study aimed to evaluate the prevalence rate of Staph aureus and determine its antimicrobial sensitivity profile among secondary school students in Duhok city, Iraq. Samples were collected from anterior nares of 492 (204 male/288 female) volunteers older than 16 years in different districts including Akre, Amedye, Bardarash and Duhok. Conventional lab tests were used for the identification of isolates. Antimicrobial sensitivity test was performed by using Kirby-Bauer disk diffusion and agar dilution assay and were conducted according to the Clinical Laboratory Institute Standards. Out of 492 subjects, 185 (37.6%) were Staph aureus carrier including57/185 (30.8 %) males. Oxacillin resistance rate was (41.08 %), followed by tetracycline, fusidic acid, ciprofloxacin, gentamicin, vancomycin, clindamycin and rifampicin (27.02 %, 19.46 %, 9.19 %, 8.65 %, 7.56 %, 3.78 % and 1.08 %), respectively. All isolates were susceptible to Teicoplanin. Further studies are needed to monitor Staph aureus antimicrobial profile and implementing plans to tackle such a problem is recommended.
Keywords: Staph aureus, antibiotic sensitivity, nasal carriage, Duhok, Iraq

Functional Studies on Starter Unit Selection During Daunorubicin Biosynthesis

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Abstract

Daunorubicin (DNR) and its C-14 hydroxylated derivative doxorubicin (DOX) are important anticancer chemotherapy drugs used for the treatment of acute myeloid leukemia and breast cancer. Although the structural, regulatory and resistance genes of the DNR/DOX biosynthetic clusters have been identified, their functions characterized and a general scheme for the biosynthetic pathway has been proposed, little is known about the structural organization of these enzymes within the PKS and how this affects catalysis. Daunorubicin and doxorubicin, isolated from Streptomyces species are biosynthesized via a pathway involving a type II polyketide synthase (PKS). This PKS complex includes a ketosynthase/chain length factor (DpsA/DpsB), an acyl carrier protein (DpsG), a β-ketoacyl: acyl carrier protein (ACP) synthase III homologue (DpsC) and a malonyl-CoA: ACP transacylase (DpsD) which catalyse the condensation of a propionyl-CoA starter unit with nine malonyl-CoA extender units to produce a decaketide. The 21-carbon, tricyclic, aromatic compound, aklanonic acid, the first isolable intermediate, is formed following enzyme catalysed reduction (DpsE), aromatization (DpsF), cyclization (DpsY) and finally C-12 oxidation of this decaketide. The exact mechanism of starter unit selection remains elusive, however, and a better understanding of this would help us modify the biosynthetic pathway in order to engineer new anthracycline natural products with improved activity and pharmacological properties. The ACP and the β-ketoacyl: acyl carrier protein (ACP) synthase III (reported to be the starter unit specifying enzyme) were therefore expressed and purified from E. coli. Mass spectrometric analysis confirmed that the β-ketoacyl: ACP synthase III was able to self-acylate and could transfer acyl groups to the carrier protein though there appeared to be little discrimination between acetyl, propionyl or butyryl groups in this process. The ability of this enzyme to carry out an initial condensation of starter units was also confirmed and our data showed that DpsC could catalyze the first condensation between an acetyl, propionyl or butyryl group with malonyl-DpsG to form acetoactyl-DpsG, β-ketovaleryl-DpsG and β-ketohexanoyl-DpsG respectively. Together, these results indicate that DpsC is not specific for either selection or initial condensation of starter units in daunorubicin biosynthesis, and we are therefore examining the influence of malonyl-CoA: ACP transacylase (DpsD) in these processes.
Keywords: Daunorubicin, Starter units, Doxorubicinin, cancer

Indole-3-carbinol induces apoptosis of chronic myelogenous leukemia cells through suppression of STAT5 and Akt signaling pathway

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Abstract

Signal transducer and activator of transcription 5 and Akt pathways, implicated in signaling transduction downstream of BCR–ABL, play critical roles in the pathogenesis of chronic myeloid leukemia. Therefore, identification of novel compounds that modulate the activity of such pathways could be a new approach in the treatment of chronic myeloid leukemia. Previous studies have demonstrated that indole-3-carbinol inhibits the proliferation and induces apoptosis of various tumor cells. However, its anticancer activity against chronic myeloid leukemia cells and the underlying mechanism remain unclear. Our data revealed that indole-3-carbinol promoted mitochondrial apoptosis of chronic myeloid leukemia–derived K562 cells, as evidenced by the activation of caspases and poly (ADP-ribose) polymerase cleavage. Treatment with indole-3-carbinol was found to be associated with a decrease in the cellular levels of phospho-At and phosphor–signal transducer and activator of transcription 5. In addition, real-time polymerase chain reaction analysis showed that the downregulation of genes is regulated by At and signal transducer and activator of transcription 5. We also found that treatment with indole-3-carbinol resulted in the activation of the p38 mitogen-activated protein kinase and reduced expression of human telomerase and c-Myc. Collectively, these results demonstrate that the oncogenic signal transducer and activator of transcription 5/At pathway is a cellular target for indole-3-carbinol in chronic myeloid leukemia cells. Thus, this clinically tested natural compound can be a potential candidate in the treatment of chronic myeloid leukemia following confirmation with clinical studies.
Keywords: Chronic myeloid leukemia, indole-3-carbinol, K562 cells, signal transducer and activator of transcription 5, Akt

Combining Comet and Micronucleus Tests for Evaluation of the Genetic Damage in Acute Lymphoblastic Leukemia patients

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Abstract

The essential repository of genetic information in all cells of the organism is DNA; any damage to DNA causes genetic changes. If these changes include genes responsible for cell growth, they will cause the emergence of cancer. Here we planned to evaluate the genetic damage in the peripheral blood lymphocytes of 50 Acute Lymphoblastic Leukemia (ALL) Iraqi Patients through combining techniques of the comet and micronucleus assay comparing with the control group. Results show that there was a significant increase in the three comet assay parameters (tail length, DNA% in the tail, tail moment) for ALL patients compared with the control group. In the same time, there was a significant increase in the frequency of micronucleus in binucleated lymphocytes of ALL patients compared with the control group; while there was a significant decrease in the Nuclear Division Index (NDI). We can conclude that the using of combining assays of comet and micronucleus is a good way for evaluation of DNA damage in blood lymphocytes of cancer patients and useful to follow up the progress of disease and response to treatment.
Keywords: Comet Assay, Micronucleus, Nuclear Division Index, Acute Lymphoblastic Leukemia

Detection of Human Norovirus among Children with Gastroenteritis in Diyala Governorate

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Abstract

Background: Acute gastroenteritis remains a global public health problem and human noroviruses persist a major cause of gastroenteritis and severe diarrheal disease around the world.
Objectives: To determine the rate of human norovirus infections among children with gastroenteritis by enzyme linked immunosorbent assay and immunochromatography, also to assess genogroup 1(GGI) and genogroup 2(GGII) by nested polymerase chain reaction in Diyala governorate.
Patients and methods: Cross sectional study were carried out of 182 children under five years old with acute gastroenteritis who attended to the emergency department of pediatrics in Al-Batool Maternity Teaching Hospital in Baqubah city, during the period from 6th September 2018 till 4th of March 2019. Stool samples were collected from each participant and stored as frozen at -70 °C to use for enzyme linked immunosorbent assay and quick qualitative immunochromatographic test, finally positive result for human norovirus was used for RNA extraction and nested polymerase chain reaction.
Results: The rate of human norovirus infection was 6.04%, most common among females 6 (54.55%) than males 5 (45.45%), age group (1-12) months showed high frequency 8 (72.73%). All participant with positive results were from Baqubah district. Education levels of the mothers of the patients were highest rate with primary education (54.55 %) followed by (18.18 %) for each secondary education and higher education, (81.82%) were used artificial milk and (18.18%) were mixed feeding while there were no positive results recorded among children with breast feeding. The highest infection rate was noticed among patients were used filtered and boiled water (54.54 %) followed by filtered water about (27.28 %). According to different clinical feature, abdominal pain11(100%), vomiting 10(90.09%), and nausea 7(63.63%) were more common than another sign. The result of nested polymerase chain reaction demonstrated that only one case was positive for human norovirus genogroup 2(GGII).
Conclusion: Human norovirus appear to be plays a major role cause of acute gastroenteritis among children especially less than 1 year old.
Keywords: Gastroenteritis, human norovirus, PCR, ELISA.

Isolation and Identification of Dermatophytes from Dermatological Specimens in Duhok Province

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Abstract

From Azadi Teaching Hospital and outpatients in Duhok province, 178 samples including hair, nail and skin were collected from patients with suspected dermatophytosis of all age groups and of both sexes, during the period of 1st March 2018 to 1st August 2018.Among the 178 patients examined, 103 (57.9 %) cases were males and 75 (42.1 %) cases were females, ranged in age between 1 year and 85 years old. The highest rate of dermatophytes infection was recorded at age group 21-40, which was 72 cases (40.4%) followed by age group 1-20 which was 50 cases (28.1%) while the lowest rate of infection was observed at age group 61 and more which was 10 cases (5.6 %).All specimens were subjected to the direct examination (Potassium hydroxide) and cultured on Sabouraud Dextrose Agar (supplemented with Chloromphenicol and Cyclohexamide) and Potato Dextrose Agar to determine the dermatophyte species. A direct microscopic examination revealed 36.5% positive; while 42.1% cases were confirmed by culture.
Keywords: Dermatophytes, Dermatologic specimen, Duhok province

Molecular Identification by using Mitochondrial gene for Cucurbit fly Dacus ciliatus (Diptera: Tephritidae) infesting Cucurbitaceae family in Kurdistan Region- Iraq

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Abstract

Survey for hosts of the fruit fly was carried out of many villages for three provinces Duhok, Erbil and Sulaimaniyah /Kurdistan region, Iraq during period 15/9-1/12/2017 and 15/5-30/9/2018. Ethiopian fruit fly Dacus ciliates (Loew) which belong to the genus Dacus family Tephritidae order Diptera were found infesting most vegetables like Cucurbitaceae and some of the fruit trees like fig. We used polymerase chain reaction (PCR) amplification technique which is a scientific technique in molecular biology to amplify a single or a few copies of a piece of DNA across several orders of magnitude, generating thousands to millions of copies of a particular DNA sequence. Damaged fruits were collected and kept in round cages galvanized by sieves cloth (35 cm diameter, 40 cm high), containing a layer of 3 cm soil to facilitate pupation
Keywords: Dacus ciliates, Tephritidea, Mitochondrial gene.

Rs2084881 and rs8170 and risk of ovarian cancer

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Abstract

Ovarian cancer is one of the most common cancers in women and the mortality rate of this cancer is increasing. Given the importance of early diagnosis in the treatment of ovarian cancer, finding biomarkers associated with this disease is essential. other countries have shown that rs2084881 on the SKAP1 gene and rs8170 on the BABAM1 gene are risk factors for ovarian cancer. Our main goal in this study is to investigate the association between the two polymorphisms and ovarian cancer susceptibility. 162 peripheral blood samples were collected from 100 controls and 62 patients and after extraction of DNA with Tetra-ARMS PCR, the genes SKAP1 and BABAM1 were studied. The tetra ARMS-PCR method is a valuable method because it has a simpler analysis, in addition to its high speed and low cost. So far 120 samples have been analyzed, SKAP1 and BABAM1 genes were observed heterozygote in most of them. Checking on patient samples is ongoing. Expected to contrary to previous studies in other countries, there is no significant association between these genes and ovarian cancer so, rs2084881 and rs8170 can't be used as potential biomarkers for ovarian cancer in Iranian populations. These findings lead us to find suitable biomarkers for the population with respect to personalized medicine, should be made an appropriate treatment according to the individual genotype.
Keywords: Ovarian cancer, Biomarker, polymorphism, Personalized Medicine

Association of TIPARP gene and RB1 gene with susceptibility to ovarian cancer

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Ovarian cancer is the most lethal of the gynecologic malignancies in women and the ninth most common in Iran. Usually, ovarian cancer detected when the patient is in advance stage, so the prediction tools are valuable. The aim of this study was diagnosed biomarker in ovarian cancer in the Iranian population. In other country have shown rs2665390 on the TIPARP gene and rs2854344 on the Rb1 gene are associated with ovarian cancer as a risk factor. In this study, our main goals find out whatever these two polymorphisms are associated with ovarian cancer risk. We collected peripheral blood samples from 60 normal women and the genes were studied with Tetra-ARMS PCR after DNA extraction. Tetra-ARMS-PCR used for the detection allele specific DNA polymorphisms and its cost-effective method. The results show that for two polymorphisms rs2854344 (located on the TIPARP gene) and rs2665390 (located on the Rb1 gene) most of the samples were heterozygote. Regarding the normal samples were heterozygote, we expect these two polymorphisms do not play an important role in ovarian cancer. These results led us to find suitable biomarkers for the population and help physicians for prediction.
Keywords: ovarian cancer, rs2665390, rs2854344

High adiponectin hormone modulates blood erythroid parameters and its relationship with EPO in patients with diabetic nephropathy

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Abstract

Serum adiponectin is a hormone of adipose tissue activating lipid metabolism and other physiological functions. Its level usually fluctuates in several metabolic diseases like in renal insufficiency and diabetes; it loses its protective role against diseases and becomes a potentially risk factor for erythroid abnormalities.
Objectives: The study designed to assess the association between adiponectin hormone, blood erythroid and various parameters in groups of patients.
Method: The study included 130 patient and 42 healthy subjects. Serum adiponectin and erythropoietin (EPO) hormones, red blood cells (RBC), hemoglobin (Hb), hematocrit (Hct), renal function test, serum insulin, fasting blood sugar (FBS), glycated hemoglobin % (HbA1c %) and homeostatic model assessment of insulin resistance (HOMA-IR) levels were estimated in all groups.
Results: Statistical analysis showed that high adiponectin was significantly associated with erythroid-related variables (EPO, RBC, Hb and Hct) in patients' groups when correlated with control. ROC analysis showed that adiponectin and EPO are significant risk factors for anemia progression in NIDDM, ESRD and diabetic nephropathy patients.
Conclusion: We suggest that high serum adiponectin level is dependently associated with EPO level and erythroid abnormalities in NIDDM, kidney failure and diabetic nephropathy patients. The present finding regarding ROC curve analysis of adiponectin hormone suggested that this hormone could be representing as risk factor for erythroid abnormality in diabetic nephropathy at ESRD.
Keywords: Diabetic nephropathy, adiponectin, EPO, erythroid abnormalities.

Resistin hormone in Diabetic Renal failure and its relation to iron status and hepcidin

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Abstract

Resistin a potent adipocyte-secreted hormone, may contribute to and modulate iron status and hepcidin level in patients with NIDDM and ESRD.
Context: The aim of the prospective study was to determine the possible role of resistin in iron status pathway in patients with non-insulin dependent diabetes mellitus (NIDDM) and end stage renal disease (ESRD) events are sparse with conflicting results.
Methods: A total of 130 patients and 42 healthy subjects were included in the study and grouped into four groups: Group 1(control), Group 2(NIDDM), Group 3(ESRD) and Group 4(NIDDM+ESRD). Resistin hormone, ferritin, hepcidin, serum iron, TIBC, and TS% were estimated.
Results: Resistin, hepcidin and ferritin were significantly increased in all groups when compared to control. TIBC none significantly decreased in NIDDM patients and significantly increased in ESRD and NIDDM+ESRD when compared to controls. Serum iron and TS% significantly decreased in all groups when compared to controls. Resistin showed positive significant correlation with hepcidin and ferritin.
Conclusion: It was determined that serum resistin elevated in patients and correlated directly with hepcidin and ferritin levels. The present finding regarding ROC curve analysis of resistin hormone suggested that resistin could be representing as a biomarker for iron dysfunction for NIDDM and ESRD.
Keywords: Resistin, Hepcidin, NIDDM, ESRD, iron status

Assessment of Radiation Dose from Computed Tomography in Erbil city, Kurdistan Region: A comparison with National Diagnostic Reference Levels

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Abstract

One of the main goals of this study was to evaluate radiation doses received by patients from CT examination, conducting in Erbil city hospitals, and compare the results with National Reference levels. The patients that participate in this study were examined in three medical imaging centers with total sample of 335 patients, 110, 100, 125, for each medical imaging department CT head, CT chest and CT abdomen. The data collected included age, gender, region examined, length, weight. Simulation software, CT Expo (Ver.2. 3. 1 Germany) were used for each examination, radiation doses from CT that received by patients, and presented in terms of Computed Tomography dose index (CTDI), dose length product (DLP). The results show that the mean values of CTDIw, DLP ranged from 6.7±5.8 to 60±1.7 mGy, 156±88.5 to 884±182.2, respectively. It is important to be aware and optimize the high radiation dose of CT equipment.
Keywords: CT- Scan, Radiation dose, CTDIw, DLP

Doppler-Defined Pulmonary Hypertension in Sickle Cell Anemia in Kurdistan, Iraq

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Abstract

To determine the frequency, clinical and laboratory associations of pulmonary hypertension in Iraqi Kurds with sickle cell anemia, a total of 94 such patients attending a major hemoglobinopathy center in Iraqi Kurdistan were enrolled. All patients were re-evaluated clinically and had their blood counts, HbF, serum ferritin, LDH, renal and liver function assessed. Transthoracic Doppler echocardiography with measurement of tricuspid valve regurgitant jet velocity (TRV) was performed. A TRV in excess of 2.8 m/s was considered for the purposes of this study as indicative of pulmonary hypertension (PH). The prevalence of TRV in excess of 2.8m/s was 10.6%. By univariate analysis: significantly higher reticulocyte count, more frequent blood transfusions and pain episodes were encountered in the PH group as compared to the non-PH group ($p = 0.001$, 0.045 and 0.02 respectively). Moreover, PH patients had significantly higher mean right atrial area, left atrial size, E wave/A wave ratio and ejection fraction by echocardiography ($p = 0.027$, 0.037, <0.001 and 0.008 respectively). Except for reticulocyte count none of the other parameters remained significant by multivariate analysis ($p = 0.024$). In conclusion the current study revealed that pulmonary hypertension is rather frequent among Iraqi Kurds with sickle cell anemia, and identified reticulocyte count as an independently associated parameter with PH in this population. Future prospective studies including right heart catheterization and appropriate medical intervention are warranted.
Keywords: Doppler, pulmonary hypertension, sickle cell, anemia.

The effect of L-arginine supplementation on body composition and performance in male athletes: a double-blinded randomized clinical trial

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Abstract

Background/Objective: Athletes used a lot of dietary supplements to achieve more muscle mass and improve their athletic performance. The objective of this study was to investigate the effect of L-arginine supplementation on sports performance and body composition in male soccer players.
Subjects/Methods: This double-blinded, randomized and placebo-controlled trial was conducted on 56 male soccer players, with the age range of 16–35, who referred to sports clubs in Isfahan, Iran. Subjects were randomly assigned to either L-arginine or placebo groups. Athletes received daily either 2 g per day L-arginine supplement or the same amount of placebo (maltodextrin) for45 days. Sports performance and body mass index (BMI), body fat mass (BFM) and lean body mass (LBM) were measured at the beginning and end of the study. Also, 3-day dietary records were collected at three different time points (before, in the middle of, and at the end of the study).
Results: The mean age of subjects was 20.85 ± 4.29 years. Sports performance (VO2 max) significantly increased in L-arginine supplementation group (4.12 ± 6.07) compared with placebo group (1.23 ± 3.36) ($P = 0.03$). This increase remained significant even after adjustment of baseline values, physical activity and usual dietary intake of subjects throughout the study. No significant effect of L-arginine supplementation was found on weight, BMI, BFM, and LBM.
Conclusions: L-arginine supplementation (2 g per day) could increase the sport performance in male athletes, but had no effect on anthropometric measurements, including BMI, BFM, and LBM. So, further studies are needed to shed light on our findings.
Keywords: L-arginine, body mass index (BMI), body fat mass (BFM), lean body mass (LBM)

The Role of Urodynamic Study in Male with Lower Urinary Track Symptoms and Benign Prostatic Hyperplasia

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Abstract

Introduction and aim: Urodynamic studies done to assess the function of the bladder and bladder outlet obstruction. Often useful in the assessment and diagnosis of patients presenting with lower urinary tract symptoms (LUTS). We conducted a retrospective and prospective, randomized study, the aim of it is to evaluate the role of urodynamic study in male patients with lower urinary tract symptoms with or without benign prostatic hyperplasia.
Patients and Method: This study was conducted as a comparative study for patients taken between 2017-2019, at Rizgary Teaching Hospital in Erbil city /Kurdistan region/ Iraq. Total of fifty 50 male patients (40-85 years) who underwent urodynamic study for lower urinary tract symptoms and benign prostatic hyperplasia (voiding dysfunction). All patients completed the symptom questionnaire (urgency, frequency, nocturia, difficulty in urination and postvoiding drippling) and the quality of life questionnaire.
Results: Total of fifty 50 male patients (40-85 years) who underwent urodynamic study for lower urinary tract symptoms and benign prostatic hyperplasia (voiding dysfunction) with median age 62.3 years. All patients completed the symptom questionnaire (urgency, frequency, nocturia, difficulty in urination and post voiding dripping) and the quality of life questionnaire. Out of 50 participants, 23 patients had symptoms less than one (1) year duration, 27 patients had symptoms more than one (1) year duration
Conclusion: This study was performed to emphasize the value of urodynamic study in a group of patients with lower urinary tract symptoms and benign prostatic hyperplasia. The patients with irritative symptoms of the benign prostatic hyperplasia after the urodynamic evaluation then management showed a better response to the treatment. Patients with lower urinary tract symptoms without significant prostatic enlargement who had urodynamic study showed better response to management with better quality of life after treatment. Also, patients with long duration symptoms found to have a larger bladder capacity than those with less than 1-year duration. And uroflowmetery has in additive value to those patients beside urodynamic study. Also, the treating physician will have an informative idea about the physiology of the bladder pathology. The only downside to urodynamic study, it is an invasive procedure that can cause transient discomfort and anxiety and carries a small risk of minimal morbidity, such as UTI and hematuria.
Keywords: Urodynamic study, Lower Urinary Tract symptoms, Benign Prostatic Hyperplasia (BPH).

Levofloxacin based regimen versus Bismuth quadruple regimen for Helicobacter Pylori eradication in Kurdistan Region, Iraq

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Abstract

Helicobacter pylori (H. pylori) infection is associated peptic ulcer diseases and gastric adenocarcinoma. The aim of the study is to evaluate the efficacy and of tetracycline quadruple therapy vs. levofloxacin-based regimen for the eradication of H. pylori. Eighty-two (82) subjects with H. pylori infection were recruited in this randomized clinical study. Subjects were randomly divided into 2 groups. First group (LBR) received levofloxacin 500mg one time a day, amoxicillin 1000mg two times a day and omeprazole 20mg two times a day for two weeks. The second group (TMB) received 140 mg bismuth sub-citrate, 125 mg metronidazole, and 125 mg tetracycline hydrochloride plus omeprazole 20mg twice per day for 10 days. 28 days after the completion of treatment course, H. pylori eradication was evaluated by the 14C urease breath test (UBT). The overall H. pylori eradication rate was 62/82 (75.6%). While the eradication success rate in the LBR regimen was 32/49 (65.3%), the eradication success rate in TMB regimen was 30/33 (90.9%) (P = 0.005; odds ratio [OR] = 0.882; confidence interval [CI] = 0.0501, 0.7079). Gender and age did not influence the eradication rate. In conclusions, bismuth-based regimen achieved a high rate of H. pylori infection eradication. This regimen can be used to overcome treatment failure in areas with high prevalence of antibiotics resistance.
Keywords: H. pylori, peptic ulcer, gastric adenocarcinoma

Detection of Circulating NK Cells in Breast Cancer Patients under Chemotherapy in Al Hillah City, Iraq

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Abstract

Background: The natural killer (NK) cells role has been investigated in the therapy of many cancer types and in breast cancer but little information is known about the effect of chemotherapy on circulating CD56 marker of NK cells in plasma of chemotherapy patients.
Methods: A total of 24 plasma sample of breast cancer patients were compared with 24 plasma sample of apparently healthy control, the CD56 concentration was detected by Elabscience ELISA kit from Elabscience.
Results: The demographic data revealed the mean±SD age of breast cancer cases was 51.16±8.91. The mean±SD of CD56 concentration for breast cancer patients and apparently healthy control was 72.76±30.5, 53.19±12.66 respectively. There were significant differences between patients and control at probability P = 0.0057.
Conclusion: The level of NK cells was elevated in breast cancer patients compared to the control group due to chemotherapy which increase the proliferation of these cells to overcome cancer.
Keywords: CD56, NK cells, Breast cancer, cancer chemotherapy

Follow up of pediatric patients treated for high grade vesicoureteral reflux (VUR) with and without neurogenic bladder

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Abstract:

Purpose: Vesico-ureteric reflux is the most common cause of febrile urinary tract infection in pediatric population with high grade reflux. Various approaches ranging from intravesical injection to ureteral re-implantation alone or with bladder augmentation for neurogenic bladders can be successfully undertaken.
Patients and methods: From the 1st November 2018 to 1st August 2019, 41 patients diagnosed as having high grade VUR with or without neurogenic bladder are managed with deflux injection, ureteral re-implantation alone or with augmentation. All patients assessed with renal function test, ultrasound and VCUG study preoperatively and postoperatively. Success rate determined in terms of resolution of hydronephrosis and normalization of renal function tests and UTI.
Results: The success rate was excellent for those patients who underwent surgical approaches whether with re-implantation alone or in combination with bladder augmentation exceeding 98 %, while for patients with high grade reflux single deflux injection resulted in 65.6% success rate.
Conclusion: In patients with high grade reflux, deflux injection may lower the grade of the reflux and may have success in terms of lowering the risk for renal function deterioration in non-neurogenic bladders, but is not for cases with neurogenic bladder. High grade reflux in patients with neurogenic bladder can be managed effectively with re-implantation and augmentation (ileocystoplasty or ureterocystoplasty).
Keywords: Vesicoureteric reflux, deflux injection, ureteric re-implantation, bladder augmentation

Evaluation of the efficacy of pneumatic lithotripsy in comparison to Holmium-Yag laser lithotripsy in the management of lower ureteric stone in terms of stone free rate

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Abstract

Background: Currently the most commonly used lithotripters by the majority of institutes are the Pneumatic and laser lithotripters for the endoscopic management of ureteral stones.
Purpose: Compare the effectiveness between the pneumatic and laser lithotripters in the management of lower ureteric stones in terms of stone free rate.
Material and Method: A total of 50 patients who presented with lower ureteric stones, group A (25) were managed with pneumatic lithotripter, and group B (25) were managed with laser lithotripter, and the stone free rate between both groups compared.
Results: There was no significant difference in patients mean age, gender ratio, side of stone and size of stone between both groups. The mean of the duration of fragmentation time was (16.60 ± 6.41) minutes in group A, and (17.20 ±6.164) minutes in group B and this was statistically insignificant (p =0.75). The intraoperative stone-free rate in both groups was 24 patients (96%), and postoperative stone free rate after 2 weeks was the same in both groups (25 patients 100%), and thus statistically the stone free rate was insignificant between both groups (p =1). The hospital stay was less than 24 hours in 21 patients (84%) in group A, while it was 22 patients (88%) in group B and this was statistically insignificant (p- value=0.68). Hematuria was seen in 3 patients(12%) in group A, while it was in 2 patients(8%) in group B and that was statistically insignificant(p =0.63).Mucosal injury occurred in 3 patients (12%) in group A while seen in 2 patients (8%) in group B and again that was statistically insignificant (p =0.63) ureteral perforation only happened in one case in group A(4%),and no patients had ureteral perforation in group B, and that was statistically insignificant (p=0.31). Post-operative fever in the first 24 hours of operation have been found in 4 patients (16%) in group A, while it was in 2 patients (8%) in group B and statistically that was insignificant (p =0.38).
Conclusion: Both pneumatic and laser lithotripsy take comparable time for stone fragmentation when used in lower ureteric stones. And the stone free rate found to be the same whatever modality is used when used to treat lower ureteric stones.
Keywords: Ureteral Calculus, Ureteroscopy, Lithotripsy, Laser, pneumatic

Impact of Prolonged Cardiopulmonary Bypass and Operative Exposure Time on the Incidence of Surgical Site Infections in Patients Undergoing Open Heart Surgery: Single center case series

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Abstract

Introduction: The harmful effects of prolonged cardiopulmonary bypass time and operative exposure time on the incidence of surgical site infection (SSI) in patients who underwent open cardiac surgery was explored in the present study.
Methods: The patients who underwent open heart surgery in single cardiac center were followed up for possible surgical site infections. The patients followed-up within 2 to 3 months of their periodic visits to the center. The data collection was performed from January 1st, 2018 to January 1st, 2019.
Results: The mean age of the patients was 55.32 (SD: 22.82 years) ranged from 30 to 81 years. Most of the patients were male 69.7%). The mean exposure time of the operation and cardiopulmonary bypass time (CBPT) were 4.30 (SD: 1.0 hrs.) and 140.38 (SD: 56.03 min), respectively. The mean duration of the patients in ICU was 21.34 (SD: 7.58 hrs.). In this study, 17 patients (4.5%) developed SSIs. The incidence of prolonged surgery was 37.8%. The study showed that those patients who developed infection had a greater operation exposure time (4.88 vs. 4.27hrs.), and CBPT (161.59 vs. 56.53 min).
Conclusion: The operation exposure and CBP times were directly related to the occurrence of surgical site infection.
Keywords: Cardiopulmonary bypass, surgical site infection, cardiac surgery

Clinical application of anatomical renal mass complexity associated with surgical approach and prediction of Hb. Drop and rate of blood transfusion

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Abstract

Background and purpose: The treatment of localized renal cell carcinoma remains overly subjective. The R.E.N.A.L. Nephrometry Score (NS) quantifies the salient characteristics of renal mass anatomy in an objective and reproducible manner. We evaluated treatment patterns of solid renal masses based on quantifiable anatomic features using Nephrometry score.
Aim: To demonstrate the clinical application of the total Nephrometry Score and its individual components not only correlate with surgical decision-making but also correlation to the prediction of Hb. Drop and rate of blood transfusion.
Patients and Methods: the demographic and clinical data of patients undergoing surgical intervention for renal mass (radical nephrectomy, partial nephrectomy, open or laparoscopic) would be recording prospectively. Renal masses will be categorized based on their complexity. The data will undergo statistical analysis to find statistically significant and non-significant relationship between complexity and surgical approach, blood loss, and pathological outcome. (Retrospective and Prospective Cohort Study).
Results: Application of the Nephrometry score is best recalled using the R.E.N.A.L. score, where R: refers to radius, E: refers to the exophytic and endophytic characteristics of the tumor, N: stands for nearness to the closest portion of the renal sinus or collecting system, A: represents the suffix applied to tumors anterior to the renal coronal plane (p for those posterior) and, L: refers to the location of the tumor relative to the polar line. Using the Nephrometry score, we analyzed which components were more likely to predict whether an enhancing renal mass would be treated by radical nephrectomy (RN) or Nephron sparing surgery (NSS).
Conclusions: The R.E.N.A.L nephrometry scoring system provides a flexible, beneficial, and reproducible tool to objectify the salient renal anatomy. In our study, we have demonstrated that the total nephrometry score correlate with surgical decision-making at our urology center. In particular, the anatomic complexity of a renal mass, as provided by the nephrometry score, predicts the application of various operation techniques. Future multicenter, large multiple sample size studies are warranted for evaluating its predicting performance of perioperative outcomes.
Keywords: Nephrometry, nephrectomy, tumor, RENAL

Estimation of Serum Ferritin in Subclinical Hypothyroidism

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Abstract

Background: Subclinical hypothyroidism (SCH) is a common condition with an incidence of 4.5 to 10% in the general population and it is more common in females (with approximately 7.5 to 8.5%) than males (2.8 – 4.4%). The diagnosis is by biochemical tests. Thyroid hormones have a role in all major metabolic pathways including hematopoiesis. In hypothyroidism anaemia is frequently found which mostly anaemia of chronic disease. Ferritin is a cellular storage protein for iron, it is found in small amount in the blood and its concentration correlates with total body iron stores. Thyroid peroxidase, an iron-containing enzyme is essential for the initial two steps of thyroid hormone synthesis, so thyroid hormone level may be altered in iron-deficient patients
Methods: In this case- control study, we included 86 patients aged between 20 and 64 years with newly diagnosed subclinical hypothyroidism and 86 of matched age and sex with normal thyroid function tests.
Results: Of the total 172 patients who participated in our study, 94.2% of them were female patients, and the mean age of patients was 32.71 years. The mean of serum ferritin level in control and patient's groups was 36.18%± 27.25% ng/ml and 15.54% ± 15.24%, respectively. Most patients with subclinical hypothyroidism had normal serum ferritin level, so the correlation of serum ferritin level with TSH level in both control and patient's groups were not significant (P=0.726, and P=0. .489) respectively. The result also showed no correlation between TSH and free T4 with serum ferritin (P= 0.491, and P=0. 988) respectively.
Conclusion: We didn't find any significant correlation between serum ferritin and hypothyroidism; however larger studies are needed in future.
Keywords: Subclinical hypothyroidism, ferritin, anaemia

Clinical characteristic, Risk stratification and 6 months Mortality in Patients Admitted to Coronary Care Unit of Slemani Cardiac Hospital

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Abstract

Objectives: to determine baseline characteristics, managements, and 6-months post discharge outcome in patients presented with acute coronary syndrome (ACS) to Slemani Cardiac Hospital (SCH).
Setting: Slemani Cardiac Hospital, a tertiary center for cardiac diseases.
Participants: A sample of patients who admitted in SCH with confirmed diagnosis of ACS (ST segment elevation myocardial infarction (STEMI), non-ST segment elevation myocardial infarction (NSTEMI), and unstable angina (UA)) who survived in-hospital course.
Primary and secondary outcome measures: Patients undergone follow up regarding post-discharge compliance to medications and follow up, and the end point of the study at 1-months and 6-months post discharge, the primary endpoint of the study was 6- months post discharge major adverse cardiac and cerebrovascular events (MACCEs) defined as mortality (cardiac and non-cardiac), ACS, and cerebrovascular attacks(stroke /or transient ischemic attack). The secondary endpoints were hospital readmission because of new ACS, pulmonary edema, and decompensated heart failure, and revascularization by either percutaneous coronary intervention (PCI), or coronary artery bypass grafting surgery (CABG).
Results: A total of 274 patient were discharged alive from our cardiac center,177 of them (64.5%) were STEMI, 97 of them (35.5%) were NSTEMI/ UA, a total compliance to regular follow up, medications, and life style modifications were: 83%, 89%, 87% respectively. 67.5% of our cases feel well without disturbing symptoms, 13.4 % were readmitted to hospital, 17.5% undergone recurrent PCI, 8% undergone CABG, 5% were developed heart failure. Mortality rate in our study was 6.5% (16) cases, and MACCEs occurred in 15.4% of all patients.
Conclusions: This study showed that the composition of our centers case regarding the type of ACS is similar to some other Asian countries, which showed very high STEMI rate compared to other local and developed countries, our 6-months post discharge follow up showed high compliance to guideline directed medical therapy, and comparable 6-months post-discharge rates of MACCE and mortality.
Keywords: coronary artery disease; mortality; myocardial infarction: Myocardial necrosis.

Effect of Low-Carbohydrate Diet versus Low-Fat Diet on Lipid Profile of Obese Adult: A Randomized, Controlled Trial

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Abstract

Background and objective: Diet is one of the most important and modifiable life-style determinants of human health. Generally, under-nutrition and over-nutrition play a role in morbidity and mortality and therefore nutritional interventions are needed to reduce morbidity and mortality through dietary change. The aim of the study is to investigate the effects of a low-carb diet compared to low-fat diet on lipid profile among a sample of adult obese population in Erbil, Iraq.
Methods: This was a randomized, controlled trial. One-hundred sixty-nine obese participants are chosen by a stratified multistage probability random sampling method and they are assigned randomly into low-carb and low-fat diet groups. The two-way ANOVA used to compare the mean differences between groups. Both groups are followed up for 24 weeks.
Results: Ninety-four obese participants completed the study. Both low carb and low-fat diet had significant effect on metabolic syndrome. Low carbohydrate diet had greater effects compared to low-fat diet on mean changes of HLD cholesterol (-12.55±9.4) and LDL cholesterol (8.44±17.9), while the low-fat diet had more effect on serum cholesterol (3.13±35.4) and triglyceride (47.61±81.1).
Conclusions: Both low-carbohydrate diet and low-fat diet have significant effects on lipid profile of adult participants when they followed up for 24 weeks. Low-carb diet had greater effects on LDL cholesterol and HDL cholesterol. Low-fat diet had more effect on serum cholesterol and triglyceride.
Keywords: Diet; Lipids; Obesity; Dyslipidaemia; Lipid profile; Low carbohydrate; Low-fat diet

Studying factors that might affect the academic learning in two universities; Basrah University in Iraq and Calgary University in Canada

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Abstract

Aim of study: Studying factors that might affect the academic learning and comparing between two distinct universities; Basrah University and Calgary University.
Material & Methods: The present study was done during the period (July 2017-April 2018) in two colleges; Basrah University/ College of Medicine in Iraq and Calgary University in Canada. 10 multiple choice questions were performed through Survey Monkey website, we create the same survey five times with five web links in order to get free five Surveys (each survey allow only 100 participants). 500 (47.8% males and 52.2% females) undergraduate students in Calgary University answered the questions through this website in 2 days. 500 (46% males and 54% females) undergraduate students in Basrah College of Medicine; 218 answered the questions through Survey Monkey in 6 months and 282 students answered through questionnaire forms. SPSS was used for data analysis.
Result: The highest frequency (44.04%) of undergraduate students in Basrah College of Medicine who participate in the survey have GPA (Fair) and the lowest frequency of students (2.29%) have GPA (Excellent) while the highest frequency (44%) among Calgary undergraduate students with GPA (Very good) and the lowest frequency of students (2%) with GPA (Fair). The highest frequency (38.6%) of students' opinion about laboratory equipment and resources were in the middle among the five options and the lowest frequency (8%) of students completely satisfied and think everything is perfect. Calgary undergraduate students' highest frequency (43%) of students completely satisfied and think everything is perfect. Highest frequency (40.8%) of students' opinion about faculty and library resources was in the middle among the five options. Calgary undergraduate students' highest frequency (48%) was satisfied but not perfect. The highest frequency (47.2%) and (54%) of undergraduate students in Basrah College of Medicine and Calgary respectively prefer combination of the three options of lecture. (Table.5) showed that the highest frequency (66.2%) and (81%) of undergraduate students in Basrah College of Medicine and Calgary respectively prefer writing notes during lecture. Highest frequency (40.2%) and (33%) of undergraduate students in Basrah College of Medicine and Calgary respectively spend (4-5 hours/day) for studying and reading. The highest frequency (37.8%) of undergraduate students in Basrah College of Medicine spend (3-2 hours/day) watching TV and using cell phone while the highest frequency (61%) of undergraduate students in Calgary spend (1 hour or less/day) watching TV and using cell phone. Results showed that the highest frequency (62%) of undergraduate students in Basrah College of Medicine sleep (6-7 hours/day) while the highest frequency (72%) of undergraduate students in Calgary sleep (8+ hours/day). The highest frequency (64.2%) and (55%) of undergraduate students in Basrah College of Medicine and Calgary respectively use internet as the most resource for studying.
Conclusions: Results showed some similarities and some variations between the two colleges. Advanced study with more variables might give exact idea about undergraduate students in the two colleges.
Keywords: Basrah, Canada, learning, studying

The assessment of parent's hesitancy on children immunization

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Abstract

Background and Objectives: Vaccine hesitancy is an important issue worldwide. Recent reports confirmed a growing safety fears and lack of belief in the vaccination plans. The aims of this study are to investigate and assess the opinion of immunization and to explore the incidence of vaccine hesitancy in Iraqi population.
Subjects and Methods: A cross-sectional study carried out publicly in three Iraqi cities, namely; Mosul, Duhok and Erbil. A manually invented questionnaire about parent's belief and understanding regarding immunization was distributed among people in public places. Only those parents were included who have a child(ren) at active vaccination-age (2-36 months), 300 subjects were included in the study (100 from each city).
Results: Some form of vaccine hesitancy (VH) was found in 16% of our sample. Among the 300 participants, Assertive responses were less common (6 participants), followed by concerns (18 participants), and questions (24 participants) the most common. 34% of parents reported significant delay in giving vaccines to a child or more. However, only 2% of them delayed vaccines intentionally because of doubts about vaccines importance.
Conclusion: Vaccine hesitancy is a problem. Health education plans are suggested to improve the parent opinions and beliefs about the importance of immunization.
Keywords: Vaccine, hesitancy, parents, immunization.

Prevalence of Clopidogrel Non-Responsiveness in Patients with Coronary Artery Diseases in Duhok

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Abstract

Introduction: Clopidogrel is one of the most commonly prescribed drugs for patients with coronary artery diseases. However, a considerable fraction of the patients shows clopidogrel non-responsiveness, which is a multi-factorial process. This study was carried out to determine the prevalence of clopidogrel non-responsiveness in Duhok city.
Materials and methods: The study was performed on a sample of 90 adult patients who were taking clopidogrel as an antiplatelet agent. To determine clopidogrel non-responsiveness, platelet function was assessed using a VerifyNow system.
Results: The prevalence of clopidogrel non-responsiveness among patients with coronary artery diseases in Duhok was about 52%. A Significant association between clopidogrel non-responsiveness and female gender and age was found ($p < 0.05$).
Conclusions: The prevalence of clopidogrel non-responsiveness was high in Duhok. Several factors might contribute to clopidogrel non-responsiveness including gender and age. More awareness of medical institutes about this issue is needed.
Keywords: clopidogrel resistance, platelet, coronary artery diseases.

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