

Vol 4, Supplement 1, Jun 2021 – 5th LCMPS 2021 Proceeding

PROCEEDING OF 5TH LIBYAN CONFERENCE ON MEDICAL AND PHARMACEUTICAL SCIENCES 2021

ORGANIZED BY

Center of Scientific Research and International Cooperation - University of Tripoli Alahlia

COMPLIED BY

Asst Prof. Ahmed Atia

Head, Department of Research and Consultation, Faculty of Medical Technology,

UOT

&

Prof. Nagib Elmarzugi

Faculty of Pharmacy, University of Tripoli.

PLENARY SPEAKERS

Prof. Adel Abushoffa. Department of Pharmaceutical Chemistry, University of Tripoli

Prof. Abdussalam Amara. Department of Pharmaceutics, University of Tripoli **Prof. Othman Elzentani.** Department of Forensic Medicine Ministry of Justice,

Libya

Dr. Hesham Ben Masaud. Covid-19 Pandemic Supreme Advisory Committee, Libya

Publication was made by the authority of "AlQalam Journal of Medical and Applied Sciences – AJMAS", and scientifically revised by their editorial members.

AlQalam Journal of Medical and Applied Sciences – AJMAS is one of the specialty Journal in Medical and Applied Sciences published by **University of Tripoli Alahlia-Libya**.

This proceeding available at. https://alqalam.utripoli.edu.ly/science/

ASSESSMENT OF WOUND INFECTION AFTER CAESAREAN SECTION IN MATERNITY WARD IN BENGHAZI MEDICAL CENTER

Rima Ali*, Fatima Alshaib, Marwa Alagori, Jumana Shahwan, Salama AlSafrani, Manal Alarfi

Department of Environmental Health, Faculty of Public Health, University of Benghazi **Email address**: <u>Rima.ali@uob.edu.ly</u>

ABSTRACT

Background and objectives. This study was cross sectional study conducted in maternity ward of Benghazi Medical Center (BMC) with the aim of investigating the cause of infection after cesarean section. Methods. Data was collected by using openclosed questionnaires. About 50 swabs were collected from wound patient and operation therapy environment. Results. The result showed that three different types of dangerous bacteria (MDR _ staphylococcus aureus, klebsiella pneumonia, pseudomonas aeruginosa) of the total 11 bacterial isolates. The most frequent bacteria were 54.5% (staphylococcus aureus) and the second type shows in about (15.2%) were K. pneumoniae. The main risk factors are obesity, age and emergency situations for wound infection and also the reason for the increase in infection inside BMC. Most bacteria were resistant to Ceftazidime, Ciprofloxacin, Gentamicin, Augmentin, Aztronam, Bactracim, Amikacin. Conclusion. Increase patients' awareness towards the use of antibiotics is very important to avert the antibiotics misuse Keywords: Surgical site infection, risk factor, cesarean section

ASSESSMENT OF HAND HYGIENE KNOWLEDGE, ATTITUDE AND PRACTICE (KAP) AMONG EMPLOYEES IN THE DERMATOLOGY DEPARTMENT, BENGHAZI MEDICAL CENTER

Rima Ali*, Omar El Gadari, Fatma Al-borki, Ebtehal Alshakmak, Sara Abdulmohsen Department of Environmental Health, Faculty of Public Health, University of Benghazi Email address: <u>Rima.ali@uob.edu.ly</u>

ABSTRACT

Background and objectives. In every medical services installation, the hand hygiene awareness and practicing of staff have a great impact on the programs of controlling infection. This study was conducted to evaluate the Knowledge, Attitude and Practice (KAP) about hand sanitation among healthcare workers in dermatology department -Benghazi Medical Center (BMC), and to find out if there is bacterial contamination in the hands of healthcare workers. Method: Between January to August 2020, a cross-sectional analysis was carried out in dermatology department. A total sample of 78 Health Care Workers (HCWs) were included. A self – administrated, pretested questionnaire in Arabic were used which were developed from the WHO hand hygiene guestionnaire. The hands of 20 HCWs were swabbed and cultured. Results: All of the HCWs responded to the questionnaire, giving a 100 % response rate. Majority of respondents ages were ranging between 25-34, and the majority of the them were females (74.4%). About 83.4% of the respondents were doctors, 12.8% of them were nurses and 3.8% were pharmacists. The level of knowledge regarding hand hygiene was moderate among 61.5%, while17.9% have a good level of knowledge, and 20.5% have a poor awareness degree. The knowledge level was not associated with age and gender but type of profession was significantly different in level of knowledge. Bacteria isolated showed Acinetobacter spp. was the predominant organism (45%), Escherichia coli (10%), Pseudomonas aeruginosa (5%), Klebsiella spp. (5%) lactobacillus (20%) and staphylococcus aureus (15%). Conclusion. Majority of the participants have moderate level of knowledge regarding hand hygiene. The most significant flaw in the awareness was regarding minimum period necessary for hand rub with an alcoholic product to kill the microbes on the hands and also regarding the main source of microbes causing hospital infection.

Keywords: hand hygiene, nosocomial infections, knowledge, attitude, and practice.



EVALUATION OF PROTECTIVE PROPERTIES OF CITRUS LIMON PLANT EXTRACT ON MILD STEEL IN SALINE SOLUTION.

Einas Bin Sultan1*, khawla Areef1, Manar Abazeid1, Elarbi Khalil2, Muftah Ali Shushni1 1Department of Pharmacognosy, Faculty of Pharmacy, University of Tripoli, Tripoli, Libya. 2Department of Materials and Metallurgical Engineering, Faculty of Engineering, University of Tripoli, Tripoli, Libya.

Email address: einassultan38@gmail.com

Abstract

The corrosion inhibition of mild steel in a 3.5% NaCl solution in the presence of different concentrations of the Citrus limon plant extract at a temperature range of 30 to 60 °C and for various immersion time ranging from 4 hours to 72 hours was studied using gravimetric (Weight Loss) method. The results showed that Citrus limon plant extract exhibit good corrosion inhibition efficiency. The inhibition efficiency of the Citrus limon plant extract increases with an increase in inhibitor concentration and through immersion periods but decreases with an increase in the temperature. The inhibitive effect could be due to the presence of some phytochemical compounds in the plant which is adsorbed on the surface of the mild steel.

Keywords: Citrus limon extract, Adsorption, Corrosion inhibition, Mild steel, Weight loss.

EVALUATION OF AWARENESS, ATTITUDE AND PRACTICE REGARDING ANTIBIOTIC MISUSE AMONG PUBLIC COMMUNITY IN LIBYA

Hadir Gawili*, Loubna Z Ahmed, Rehab F Alabidy

Department of Environmental Health, Faculty of public health, University of Benghazi, Benghazi, Libya

Email address: hadir.gawili@uob.edu.ly

ABSTRACT

Antibiotic resistance has accelerated by the misuse and overuse of antibiotics, as well as poor infection prevention and control. The problem of antibiotics resistance is very serious in Libya, as it appears to be on the increase, particularly with the emergency of resistance to newer drugs. This paper aimed to assess knowledge, attitude of the regarding antibiotic resistance (ABR) according to their earlier held knowledge, beliefs and experience. The study is cross sectional using online questionnaire on antibiotic misuse and self-medication awareness questionnaire designed to explore the knowledge and attitude of 253 members public community around Libyan cities, and it carried out from September 2018 to June 2019. Our assessment revealed most Libyan community participants were aware of the antimicrobial resistance and its consequences. The only concern was their casual attitude regarding the antibiotic use. Further educational interventions are necessary to improve their understanding and perceptions on antibiotic resistance, as well as their attitude towards antibiotic use.

Keywords: Awareness, antibiotic, public community, Libya, resistance



PRIMARY CICATRICIAL ALOPECIA AMONG LIBYAN PATIENTS: A CLINICOPATHOLOGICAL AND EPIDEMIOLOGICAL STUDY

Fauzia Musbaha

Department of Dermatology, Faculty of Medicine, Tripoli University, Tripoli, Libya **Email address.** <u>fauziamusbah@yahoo.com</u>

ABSTRACT

Introduction: Cicatricial alopecias are a group of disorders characterized by hair follicle destruction with the consequence of permanent hair loss. The current study was conducted to evaluate the epidemiological and clinicopathological characteristics of cicatricial alopecia in Libyan community. Methods: Thirty-one patients with confirmed diagnosis of cicatricial alopecia by biopsy and tricoscopy during Jan 2018 to Dec 2019 were included in this study. Data were collected by filling a pre-designed questionnaire by all included patients. Descriptive statistics were used for analyzing the results. Chi-squared test was performed to test the relationship between different variables using SPSS 22. Results: Out of 31 cases, 16.1% of patients suffered from lichen planopilaris (LPP), 25.8% discoid lupus erythematosus (DLE), 6% Folliculitis decalvans, 6.45% pseudopelade of brocq, and 16.12% Frontal fibrosing alopecia. Conclusions: Cicatricial alopecia was found to affect mainly middle-aged individuals, particularly females. Early diagnosis and treatment can decrease the burden of this concern.

Keywords. Cicatricial, Alopecia, Females.



THE EFFECT OF OLEUROPEIN AND VITAMIN C ON DIABETIC NEPHROPATHY INDUCED BY STREPTOZOTOCIN (STZ) IN MALE RATS

Marium Hussein

Department of Zoology, Faculty of Science, Omar El-Mokhtar University, Libya **Email address.** marium.hussein@omu.edu.ly

ABSTRACT

The antioxidants, such as phenolic compound oleuropein and Vitamin C play important roles in improve cell function and protect the affected tissues. The present work was designed to study the effects of Oleuropein and vitamin C of diabetic nephropathy in male rats. Diabetes was induced by a single i.p. dose of STZ (40 mg/kg b.w.). Pure oleuropein compound (5 mg/kg b.w.) and vit.C (150 mg/kg b.w.) was orally administered once per a day for 15 days after diabetes induction. Oleuropein and Vitamin C have been observed to keep creatinine, urea, uric acid and kidney function near normal levels compared to very high levels in the diabetic group, and improvement total protein globulin and albumin. Oleuropein and vitamin C significantly attenuated the oxidative status of diabetic rats. In addition, improved the different changes kidney tissue in diabetic rats treated with oleuropein and vitamin C has an effective effect on sterptozetosin -induced diabetes male mice by reducing the biochemical and histological parameters in the kidney function due to the action of the antioxidants.

Keywords: Oleuropein, Vitamin C, Diabetes, Oxidative Stress, kidney function.

GARLIC (ALLIUM SATIVUM) ALLEVIATES TRAMADOL-INDUCED HEMATOLOGICAL PARAMETERS AND BLOOD SMEAR ON MALE RABBITS

Fayrouz Khaled*, Ferdows Abdulgader, Zuhour Albagdadi

Chemistry Department, Faculty of Science, Omar Al-Mokhtar University, El -Beida-Libya **Email address**: <u>faylzobair@yahoo.com</u>

ABSTRACT

Garlic (ALLIUM SATIVUM) is a common food for flavour, spice and it is one of the herbs most commonly used in modern folkloric medicine. Tramadol is an opioid torment medicine utilized to treat direct to tolerably extreme torment. When taken as an immediate-release verbal definition, the onset of torment help as a rule happens inside around an hour. Therefore, the present study was carried out to investigate the potential protective effects of garlic against tramadol toxicity. tramadol (40 mg/kg BW), garlic (1 mg/kg BW) were orally administered by gavage alone or in combination. The tried measurements were given to rabbits each other day. Results obtained showed that tramadol significantly (P < 0:05) decreased plasma blood haemoglobin (Hb), total erythrocytic count (TEC) and packed cell volume (PCV), while total leukocyte count (TLC) increased. Results demonstrated the beneficial influences of garlic alone and/or in combination in reducing the harmful effects of tramadol. Oral administration of tramadol induced profound alterations in the morphology of erythrocytes. In rabbit treated with tramadol the cells were showed alteration in normal shape from star shaped to sickle cells. The study showed the protective effect of garlic induced harmful effects of tramadol on the haematological parameters and blood smear on male rabbits.

Keywords: Garlic, Tramadol, Haematological parameters, Rabbits.





THYROID DISEASE AND ANAEMIA AMONG EARLY PREGNANT IRAQI WOMEN

Wassan Nori ¹*, Alaa Ibrahim Ali, Roaa Mokram Hamed²

¹College of Medicine, Mustansiriyah University, 2The National Center of Hematology, Mustansiriyah University

Email address: Dr.wassan76@uomustansiriyah.edu.iq

ABSTRACT

Aims: Iron deficiency anaemia and thyroid disease are common obstetrical problems. Both cause a wide range of complication, empathizing feto-maternal wellbeing. We verify iron deficiency anaemia effect on thyroid hormones during the first trimester. **Methods:** A cross-sectional study at Al-Yarmouk Teaching Hospital enrolled 100 primigravidae in their first trimester of a singleton pregnancy. Participants were subdivided into anaemic cases (50/100) and healthy controls (50/100) based on serum haemoglobin. We evaluated serum haemoglobin, ferritin, iron, Total Iron-Binding Capacity (TIBC)and T3, FT4, and TSH for all. Results: Both groups were comparable in age, body mass index, and gestational age. Higher serum levels of haemoglobin, ferritin, iron TSH, T3 were seen in the healthy controls versus anaemic cases; all differences were meaningful. Only TIBC and serum FT4 was significantly higher in anaemic cases. The ROC curve highlighted the validity of study markers in diagnosing anaemia. Serum iron was the most sensitive blood indices associated with anaemia, followed by ferritin, with a sensitivity of 94,84%, respectively. Conclusion: Thyroid disorders were very common in anaemic patients. As a result, women's iron levels must be enhanced, and thyroid disease screening can begin early in pregnancy. Screening for both will unravel hidden differences and improve pregnancy outcome. Keywords: Iron deficiency anaemia, thyroid hormones, first trimester.



PARENTAL MISCONCEPTIONS REGARDING ANTIBIOTIC USE FOR FLU AND SORE THROAT IN CHILDREN

Samira Bub¹*, Zaynab Bub², Mohamed Elhenshiri¹

National Centre for Disease Control, Department of English, the University of Tripoli Alahlia **Email address**. <u>samirabub@yahoo.com</u>

ABSTRACT

Introduction: Misconceptions about role of antibiotics for treatment of childhood flu and sore throat potentially lead to misuse by parents. Objective: To assess knowledge, attitudes and practices of parents about antibiotic usage for flu and sore throat among their children. Methods: The study subjects were parents who brought their children to the out-patient clinics of a government paediatric hospital in Tripoli, (N= 214). Data were collected by using a modified pretested questionnaire. Responses were analysed with IBMSPSS version 20.0. Descriptive statistic was used to summarize the data and a p-value of <0.05 was considered statistically significant. Results: The study included 214 Libyan parents, most of them 73.4% were mothers. Third of the parents showed poor level of knowledge about antibiotics, and only 9.8 % showed good level of knowledge. Less than half 45 % of the respondent reported physician as their source of information. Nearly half of the respondents (47.2%) revealed negative attitudes towards antibiotics. Moreover, there was some association between the levels of overall knowledge and overall attitudes of the parents towards antibiotics (r = 0.409, p<0.001). Nearly half of the parents (44 %) used non-prescribed antibiotics at least once among their children in the previous year. Conclusion: This study revealed parental misconceptions regarding the role of antibiotics for treatment of childhood flu and sore throat, which indicate a need of health education interventions to decrease misconceptions and increase awareness of the parents regarding use of antibiotics.

Keywords: Misconceptions; Antibiotic; knowledge; Attitude, Tripoli.





EFFECTS OF HEATING AND FREEZING ON VITAMIN C CONTENT IN CARROT AND CABBAGE

Omar Moftah

Department of Chemistry Faculty of Sciences- Al-Asabaa. University of Gharyan **Email address**. <u>Omarali702@yahoo.co.uk</u>

ABSTRACT

This study aimed to estimate the effects of heating and freezing processes on the vitamin C contents of carrot and cabbage. Samples were purchased from local marked in Alasabaa city. Vitamin C contents in these samples were determined for fresh, freeze and cooked states by titration with iodine solution method. Results indicate that, the vitamin C contents in fresh carrot ranged from 44.1 mg/100g to 49.3 mg/100g with mean value 47 mg/100g. while in fresh cabbage ranged from 52.8 mg/100g to 70.4 mg/100g with mean value 63.8 mg/100g. The effect of heating process was clear on vitamin C contents of carrot and cabbage samples which was decrease by 38.7 % and 25.4 % respectively. and these percentages were increase by freezing processes to be 40 % and 40.4 % in both. Generally, consumption of fresh vegetables provided daily requirements from vitamin C and other nutrients. **Keywords**: vitamin C, heating, freezing.

THYROID FUNCTION ABNORMALITIES AN EXTRA BURDEN IN PATIENTS WITH SYSTEMIC LUPUS ERYTHEMATOSUS PATIENTS

Ekhlas khalid Hameed¹, Khudair Z Al-Bedri², Hind Mohammed²

The Clinical Biochemistry department -Al-Kindy college of Medicine – University of Baghdad, Iraq¹, Rheumatology and Medical rehabilitation unit, department of Medicine, College of Medicine-University of Baghdad, Iraq²

Email address. ikhlaskhalid@yahoo.com

ABSTRACT

Background. Systemic Lupus Erythematosus (SLE) is a multisystem autoimmune disease caused by immune system-mediated damage. Thyroid dysfunction is one of the most common endocrine diseases. The association between thyroid dysfunction and SLE deserves special attention as part of the preventive and therapeutic strategies. This study aimed to assess the prevalence of thyroid hormone abnormalities in a sample of Iragi women with SLE. Materials and Methods: A casecontrol study was conducted at Baghdad Teaching hospital, Department of Rheumatology during the period from September 2016 to July 2017. Including 58 women with SLE and 120 controls, demographic and clinical data were collected. Serum T3, T4, TSH, complete blood count, ESR, anti-double-strand DNA and complements C3, C4 test were performed. Results: The mean age of the participants was 28.26 \pm 7.1 and 29.18 \pm 6.3 years in SLE and control groups respectively with no statistically significant differences between both groups regarding age, BMI. Thyroid dysfunction was more frequent in SLE patients (25.9%) versus (5%) in the control, (P< 0.05). Primary and Subclinical hypothyroidism were the more frequent disorder in SLE patients six (10.3%) versus two (1.7%) and five (8.6%) versus none respectively. Subclinical hyperthyroidism was reported in two (3.44%) and primary hyperthyroidism in two (3.44%) of SLE patients. Arthritis is the most common presentation. Prednisolone and Hydroxychloroguine were the more frequently used medications with insignificant association with abnormal thyroid function in SLE. Conclusion: Thyroid disorders are frequent in Iraqi SLE women with a higher prevalence of Primary and subclinical hypothyroidism

Keywords: Thyroid dysfunction, Systemic Lupus Erythematosus

EVALUATION OF OVER- THE-COUNTER COUNSELING PRACTICES BY LIBYAN COMMUNITY PHARMACISTS

Sawsan Alseid, Eman Elmahjoubi, Nabila Rghebi*

Department of Pharmaceutics, Faculty of Pharmacy, University of Tripoli, Libya **Email address**. <u>regabi78@yahoo.co.com</u>

ABSTRACT

Background: Community pharmacist plays a crucial role in promoting, maintaining and improving the health of the community. The pharmacist in community pharmacies answers questions about prescription and Over- The- Counter (OTC) drugs and gives advice about home health care supplies and durable medical equipment. Aims: To explore knowledge and attitudes of Libyan community pharmacists and patients toward Over- The- counter (OTC) counselling. Method: Between January and May 2016 we conducted a study on patients` knowledge and attitudes toward pharmacist -patient counselling. Two different questionnaires delivered randomly to two groups (100 patients) and (103 community pharmacists) selected from 108) community pharmacies located in Tripoli/Libya. Results: Although 62% of the community pharmacists assured that they counsel patients before dispensing OTC medication and 49% of them were focusing on the medication patient history before dispensing. Only 35% of the participating pharmacists counselled patients about prescribed medicines. Conclusion: The data showed the awareness of Libyan pharmacists towards delivering effective communication skills was not satisfactory and sufficient knowledge on OTC was still lacking. Community pharmacists must set the stage for optimal communication by using active listening, minimizing environmental barriers and overcoming patient obstacles that may make counselling more difficult.

Keywords: pharmacy, community pharmacists, patients, OTC and patients counselling.





EVALUATION OF CLINICAL CHARACTERISTICS AND LABORATORY RESULTS OF COVID-19 IRAQI PREGNANT WOMEN

Alaa Ibrahim Ali*, Wassan Nori

College of Medicine, Mustansiriyah University Email address. <u>alaa.ibraheem@uomustansiriyah.edu.iq</u>

ABSTRACT

Aims: To verify the value of simple blood indices as a predictor to COVID-19 infection among pregnant women. Methods: A prospective case-control study was carried in Al-Yarmouk Hospital from April 2020-till until April 2021. A total of 80 pregnant women were recruited. Aged range 20-42 years, at 28-36+6 weeks of a singleton pregnancy. 40/80 tested +ve for COVID-19 based on real-time polymerase chain reaction test (PCR). Another 40/80 were taken as matched controls. Results: No statistically significant differences were reported upon comparing the two groups in terms of age and gestational age, (P-value= 0.341, 0.445, respectively). However, statistically difference was found for Hb, WBC, neutrophil count, lymphocyte count, platelet count, MPV, RCW, neutrophil/lymphocyte ratio, and platelets/lymphocyte ratio; all were significantly higher in the study group versus the healthy control with a P-value <0.0001. Conclusion: The neutrophil/lymphocyte ratio may serve as a critical factor determining the severity of COVID-19-infection in the early stages of the disease. Early detection and treatment of COVID-19 severe cases reduce the risk of an adverse pregnancy result.

Keywords: Clinical characteristics, Coronavirus, COVID-19, Laboratory tests, Pregnancy.



https://alqalam.utripoli.edu.ly/science/ eISSN 2707-7179

THE EPIDEMIOLOGY OF BACTERIAL VAGINOSIS AND THEIR ANTIBIOTIC SUSCEPTIBILITY AMONG WOMEN COMPLAINING OF GENITAL TRACT INFECTION IN TRIPOLI, LIBYA

Ahmed Atia

Department of Anaesthesia and Intensive Care, Faculty of Medical Technology, The University of Tripoli, Libya.

Email address: ah.atia@uot.edu.ly

ABSTRACT

Background: Bacterial vaginosis is a worldwide issue due to the raised risk of acquisition of sexually transmitted infections. The aim of the study was to assess the incidence of bacterial vaginosis and their antimicrobial pattern in women attending different private clinics in Tripoli, Libya. Methods. A cross-sectional study was conducted among 204 women between Jan to Oct 2020. Gram-stained vaginal swabs were examined microscopically, characterized by colony morphology, and their antimicrobial susceptibility pattern was determined. Results: The overall prevalence of bacterial vaginosis was 41%. Out of 48 bacterial isolates, 76.1% were gram-positive and 23.8% were gram-negative bacteria. The overall drug resistance level of grampositive bacteria was high against penicillin, co-amoxiclav, and amoxicillin. Vancomycin and imipenem were the most active drugs against Gram-positive bacteria. High level of drug resistance of gram-negative bacteria against coamoxiclay. Ceftriaxone, cefotaxime, and amikacin were the most active drugs against Gram-negative bacteria. Conclusions. The prevalence of bacterial vaginosis was high. Routine culture of vaginal samples should be performed on patients with vaginitis and the drug susceptibility pattern of each isolate should be determined. Keywords: Bacteria, Vaginosis, Antimicrobial, Tripoli.

 $_{age}15$