College of Medicine
Degree: M.Sc.

No	Name	Title	Degree	Year
1	Khales Belal Muhemmad Ali	Prevalence of skin diseases among primary school children in Erbil city	M.Sc	2005
2	Baran kamal Ahmed	Maternal mortality in maternity hospital in Erbil Governorate	M.sc	2005
3	Tuqa Yousif Sharief	Some immunological studies of missed aborted women infected with cytomegalovirus (CMV) in Erbil city	M.Sc	2005
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6	Dler Qader Omer	Role of the brain rennin-Angiotensin system in the prossor response to central hypernatremia	M.Sc	2006
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8	Awaz Ahmed Kamal Shalli	A Study on Iron Status in Patients with Ischemic Heart Disease in Sulaymani Governorate	M.Sc.	2006
9	Aso Ako mohammad	Diagnostic and Molecular genetic Studies on the bacteria staphylococcus spp. Isolated from various clinical specimens	M.sc	2006
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11	Amin Aziz Bakir	Hepatitis C virus infection in Erbil province; prevalence, diabetogenic role, and ALT activity profile	M.sc	2006
12	Omer Ibrahem Ababakir	The impact of carbohydrate intolerance on the health of children under 2 years of age in Erbil city	M.sc	2006
13	Suzan Muhsin Qarani	Bacteriological and Plasmid DNA Content Studies in Proteus mirabilis Isolated from Different Clinical Sources	M.Sc	2006
14	Faisal Arab Hamad	Frequency of the ABH blood group antigen secretors among kurds	M.Sc	2006
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17	Haveen Azo Mohammed Amin	Value of MRI examination in comaprision to clinical diagnosis in acute injury of knee joint with normal knee radiograph	M.Sc	2007
18	Aras Rafiq Abdulla	Value of comuted tomography in stroke	M.Sc	2007
19	Susan Abdulkader Farhadi	Pharmacological and antimicrobial studies on aqueous extract of salix babylonica	M.Sc	2007
20	Salim Khalid Muhammed	The influence of exercise training on body mass index, lipid and lipoprotein profiles	M.Sc	2007
21	Payman Anwar Rashid	Relation of prostate specific antigen and histopathology of prostate biopsy	M.Sc	2007
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23	Rawand Pouls Shamoon	Prevalence and Etiological Classification of Thrombocytopenia among a Group of Pregnant Women in Erbil City	M.Sc	2008
24	Zana Mustafa Mahmood	Ultrasonographic measurement of normal splenic parameters in Erbil population	M.Sc	2008
25	Niaz Salih Abdullah	Physical evaluation to direct digital and conventional intra oral radiography	M.Sc	2008
26	Biyan Sabir Ebrahim	Study of magnification and distortion for periapical radiography in parallel and bisecting angle techniques	M.Sc	2008
27	Zekra Ali Aziz	Liability to Cervical Spondylosis Among Group Of Computer Workers In Erbil City	High Diploma	2008
28	Sanabil Slewa Babka	Body Iron Status in Blood Donors in Erbil	M.Sc	2008
29	Niaz Salih Abdullah	Physical evaluation to direct digital and conventional intra oral radiography	M.Sc	2008
30	Ronak Saeed Ahmed	Pattern of different types of viral wart in patients attending the department of dermatology and Venereology at Rizgary teaching Hospital in Erbil	M.Sc	2008
31	Mohammed Dhahir Ali	Iron status in parents of β-thalassemia major patients in Kurdistan region of Iraq	M.Sc	2008
32	Fargeen Ezzaddin Abdullah	Detection of Insulin Resistance In Overweight & Obese Individuals	M.Sc	2008
33	Dilshad Abdulla Hassan	Isolation and Identification of Poliovirus From Wastewater and Stool of Children In Erbil City	M.Sc	2008

34	Saran Abdulkader Noralden	Prediction of bone marrow cellularity from aspiration as compared to trephine biopsy	M.Sc	2008
35	Jamila salih hamadamin	Apostmortem study of sudden death among adults in Erbil Governorate	M.sc	2008
36	Hawar K.Darwish Amin	Clinical and pathological characteristics of renal biopsies done in Erbil teaching hospital	M.Sc	2008
37	Avang Younis Haddad	Types of anaemia and body iron status in patients with thyroid diseases in Erbil province	M.Sc	2008
38	Millat Ismail Haji	Anthropometric measurements among newborns and its relation to maternal factors in maternity hospital in Hawler city	M.Sc	2008
39	Fairuz Abdullah Kakasur	Role of KI-67 Immunohisto Chmistry in Grading of Invasive	M.Sc	2008
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41	Sheila Mufeed Nuraddin	Symptomatic and Asymptomatic Urinary Tract Infections during Pregnancy (Bacterial Agents & Predisposing Factors)	M.Sc	2009
42	Sherzad Abdulahad Shabu	Prevalence of childhood obesity among a sample of basic education school children in Erbil city	M.Sc	2009
43	Muhammad Abdulwahhab Hassan	Effects of Olanzapine and Haloperidol on Serum Malondialdehyde, Prolactin Level, Blood Glucose and Lipid Profile in Schizophrenic Patients	M.Sc	2009
44	Berivan Adnan Yasin	Prevalence of female Genital Mutilation among a sample of women attending health care facilities in Erbil city	M.Sc	2009
45	Afrasiab Mosa Yones	Deaths from Road Traffic Accidents in Duhok government	M.Sc	2009
46	Tara Nuraddin Abdulla	Audiometric Hearing Threshold testing of Children at Primary School in Erbil	M.Sc	2009

Prevalence of skin diseases among primary school children in Erbil city

Name: Khales Belal Muhemmad Ali
Nature of the research: Academic
Degree: M.sc
Specialty: Community Medicine
Date the discussion: 25/1/2009
Supervisor: Dr. Omer Kadir Surchi

Abstract

Skin diseases constitute serious public health problems thought the world, especially in children, thus understanding epidemiology of these diseases is essential for prevention management. The aim of the study is determine the prevalence of skin diseases in primary school children in Erbil city, with its relation to age, sex and various socioeconomic factors. A survey was conducted from September 2004 to April 2005 to determine the prevalence of various skin diseases in primary school children in Erbil city, which profiles the dermatological health condition among primary school children in the city. A total of 6915 pupils aged 6-15 years were interviewed and examined for skin diseases from 32 primary schools using multistage random sampling technique. The overall prevalence of skin diseases was 40.6%, the commonest skin conditions with their respective point prevalence were pityriasis alba (10.7%), pediculus capitis (9.1%), melanocytic nevi (5.2%), herpes simplex (2.8%), acne vulgaris (2.3%), viral warts (2.2%) and atopic eczema (1.9%). After grouping of the diseases, Infectious dermatoses got the highest prevalence rate (15.3%) within all the skin diseases, followed by eczematous skin diseases (13.1%). The prevalence of skin diseases was more common in females (43.25%), than in males (37.79%). Pediculus capitis was the most common disease in females (14.87%), while pityriasis alba was the commonest in males (12.77%). Infectious skin diseases were more common in females (20.02%), than in males (10.62%). The age group of 6-8 years old was with the highest prevalence rate (45.37%), followed by the 9-11 years age group (43.37%) and 12-15 years age group (30.95%). Pityriasis alba was with the highest prevalence rate in the age groups of 6-8, and 9-11 years (15.5%, 13.3% respectively), while the most common skin disease in 12-15 years age group was melanocytic nevi (7.7%). The role of socioeconomic status was clear in this study, that the highest prevalence rate of skin diseases was among low socioeconomic group (60.19%), followed by the intermediate group (31.86%) and the least was in the high socioeconomic group (29.79%). Infectious dermatoses were more common in low socioeconomic group (28.29%), than in intermediate group (10.39%), and than in high group (7.23%). This study showed that pediculus capitis is the commonest skin problem which warrants studied steps for controlling it in the school and the community; also it shows that skin conditions are common among school children, so it's advisable to plan and implement relevant health education programs and preventive measures to control and minimize the disease prevalence.

Maternal mortality in maternity hospital in Erbil Governorate

Name: Baran kamal Ahmed
Nature of the research: Academic
Degree: M.sc
Specialty: Community medicine
Date the discussion: 5/2/2006
Supervisor: Dr. Dashty A. Al-bustany

Abstract

In this study the main objectives were to estimate the maternal mortality rate among attendants of maternity hospital in Erbil governorate and to improve maternal care through analysis of the factors affecting MMR. This study is a descriptive retrospective study covers a five years period (2000-2004) in which we determined MMR for each of those years in Erbil maternity hospital, also we determined the causes of maternal deaths and we analyzed the factors that affect MMR as age, gravida, type of termination of pregnancy, mode of delivery, type of CS when present, place of vaginal delivery, time of death in relation to pregnancy, residence, occupation of the dead cases and their husbands and presence of antenatal visits. Descriptive and inferential statistical analysis was done. There were 76441 live births and 34 maternal deaths with MMR 44.5/100,000 live births in the maternity hospital in those five years period and there was downward trend in MMR from 67/100,000 live births in 2000 to 34.9/100,000 live births in 2004.The majority of cases (61.8%) were residents inside city. Majority of maternal deaths occurred in low income families (58.8%) and most of dead cases (91.2%) were housewives. The mean age for MM was 27.7 years old, and most common age groups for MM were 16-20 and 31-35 years old where each of them formed 32.3% of total MM. MM increased with increasing gravida where 47.1% of MMs were mothers who had more than five pregnancies. Most of MMs (88.2%) occurred with delivery, and MMR in CS was three times more than in vaginal delivery and it was more for emergency CS than elective CS (12:1). Most of MMs (70.6%) occurred in postpartum and post termination period. Most MMs were due to direct causes (91.2%). The causes of MM were eclampsia and its complications 20.6%, pulmonary embolism 17.5%, postpartum haemorrhage due to atony or retained placenta 14.7%, genital tract trauma 11.8%, amniotic fluid embolism 11.8%, and complications of anaesthesia 5.9%. This study concluded that MMR in maternity hospital in Erbil governorate was worse than that in the developed countries but better than most of the developing countries. The factors which increased the risks for MM were low economic status, 16-20 and 31-35 age groups, gravida > 5, lack of antenatal visits, emergency CS, and postpartum period. More than half of MM occurred by causes that could be decreased by better supervision and management as eclampsia, PPH, rupture uterus and complications of anaesthesia. There were deficiencies regarding the registration of informations in the patients' case sheets in our hospitals.The recommendations of the study were to decrease the MM by providing better antenatal care to decrease the complications of pregnancy as eclampsia, PE, APH and complications of abortion, providing better care during delivery to decrease MM by decreasing and early detection of delivery complications as genital tract trauma especially uterine rupture, PPH, sepsis and anaesthetic complications, improving the postpartum care and family planning to decrease chance of pregnancy in critical age groups (before 20 and after 35 years old), and to encourage better registration of informations in the patients' case sheets in our hospitals for better analysis of our health status in the future.

Some immunological studies of missed aborted women infected with cytomegalovirus (CMV) in Erbil city

Name: Tuqa Yousif Sharief
Nature of the research: Academic
Degree: M.Sc
Specialty: Biology
Date of the discussion: 25/12/2005
Supervisor: Assistant Professor Dr. Sallah Ali
        Assistant Professor Dr. Khuder H. Ali Al-Horan

Abstract

this study was conducted to reveal the prevalence of cytomegalovirus infection missed Aborted woman and pregnant women in Erbil city, searching was carried out for the rate of separate Immune antigens for this Virus in aborted and normal pregnant as control group using ELISA techniques . The Study includes seventy samples of Abortion , divided into two groups , the first group was the aborted women in the first stage of pregnancy (52), and the second group was in aborted women in the second stage or" pregnancy (18). Fourteen samples (14) of normal pregnant used as (control group) which ended with normal birth

- The rate of separating; antigen Qualitative (IgG) against Cytomegalovirus was high in both abortion and pregnant women , where the rate of positive antigens in abortion , in the first stage of pregnancy (94.23 %) and < 88.88 %) for abortion the second stage of pregnancy ,and (92.86 %) In the control group . There is no any incorporeal teams to the spread of these antigens among the studying groups. In spite of no incorporeal comparison for spreading the specific antigens IgG among the studying, groups , but the titer of positive antigens shows the incorpeal comparison (P < 0.0l) among these groups where abortions group
Have high titer beside some of light titer and moderate , while the control group have no high liter , but mostly containing light and moderate titer . (IgM) antibody rate was (32.7 %) for aborted woman in the first stage of Pregnancy and (27.8 %) for abortion in the second stage of pregnancy . The group control did not showed any positive antigens for the specific antigens , and the consequent of analytical computing showed the existence of (he incorporeal comparison i K 0,01) for spreading these antigens among the abortion and control group,

- blood groups for abortions compared with frequency of these groups in study area, was different Ihe consequences of analytical computing shows the existence of the incorporeal comparison (P < 0.01) for the blood group frequency between abortions and control groups.
The Differential of spreading Antigens virus (IgG) and (IgM) among the different blood groups for abortions that showed some of blood groups large spreading for the specific antigens (IgM) in it and having height rate of qualitative antigens (IgG).

- There is significant relationship between red blood cell against the immune Globulin and occurrence of antivirus antibody (IgG) and Rhesis factor in spreading specific antigens against cytomegalovirus.
- Increased of number White blood cell in abortion compare with the Control groups ,specially in abortion infected with virus.For the Specific antigens strong ejective relation ship in the rate of lymphocytes in infected women blood.

Screening of hepatitis B surface antigen (HBsAg) among certain risk groups and general population in Erbil governorate

Name: samir mahmood Othman
Nature of the research: Academic
Degree: M.Sc
Specialty: Community medicine
Date the discussion:
Supervisor: Dr. Abdul Aziz Yousif Mansoor

Abstract

HBV is a major public health problem with consequent burden on economy and a common cause of morbidity and mortality worldwide.The aim of this study was to find the prevalence rate of HBsAg in certain risk groups such as; Thalasaemic patients, Haemodialysis patients, Health care workers, Household contacts and blood donors as well as in general population. This cross sectional study was conducted in Erbil Governorate from October 2004 to September 2005, involving 971 individuals selected by stratified random sampling. Individuals were directly interviewed and screened for the presence of HBsAg over a period of six months. Special questionnaire was designed for data collection. Enzyme Linked Immunosorbent Assay (ELISA) technique used for detection of HBsAg. This study showed that the overall prevalence rate of HBsAg among studied samples was 3.5%, with a higher prevalence rate of HBsAg was frequent (4.59%) in risk groups than in genera! population group (0.72%). Highest prevalence rates of HBsAg were detected among household contacts and haemodialysis patients (27.69%), (25%) respectively. On the other hand lower prevalence rate of HBsAg was detected among thalasaemic patients, health care workers and blood donors (1.23%), (1.31%), (1.76%) respectively. The prevalence rate of HBsAg was more in female (4.32%) than in male (3.09%) and more among married individuals (3.76%) than non-married individuals (3.29%), but they were not significant statistically. The prevalence rate of HBsAg increased proportionally with age. Among health care personnel; cleaning service workers, and doctors, showed the higher prevalence rate of HBsAg (3.03%), (2.27%) respectively. Highest prevalence rate of HBsAg was detected among jobless (7.37%) and military force personnel (6.57%). With respect to the education level and socioeconomic state the prevalence rate of HBsAg was higher among illiterates (8.08%) and primary school level of education (4.07%) than other level of educations and more among low socioeconomic state (5.21%) than high socioeconomic state (0.75%). About 1/3 of infected cases have one or more of their family member also infected. Among the positive household contacts 11.11% were mothers, 16.66% were offspring and 72.2% were siblings. The prevalence rate of HBsAg increased as a function of family history of jaundiced, contact with jaundiced patients. Blood transfusion and past history of surgical operation was found to play a significant role in increasing the prevalence rate of HBsAg. The study concluded that HBsAg prevalence was frequent in household contacts and haemodialysis patients when compared to health care workers, thalasaemic patients, blood donors and general population. According the results found in this study and conclusions; screening all risk groups for HBsAg and adoption World Health Organizations strategies to promote the vaccination program are recommended.

Role of the brain rennin-Angiotensin system in the prossor response to central hypernatremia

Name: Dler Qader Omer
Nature of the research: Academic
Degree: M.Sc
Specialty: Medical physiology
Date the discussion: 25/10/2006
Supervisor: Asst. Prof Dr. Salah Al-din M. A. Al-Miran

Abstract

Recent data indicate that hyperactivity of the intrinsic brain renin -angiotensin system (BRAS) plays a critical role in mediating hypertension in both humans and animal models of hypertension. The mechanisms by which increased BRAS activity contributes to hypertension are not well understood. Experiments were designed to investigate the effects of intravenous (IV) and intracarotid (IC) infusions of angiotensin II (Ang II), and IC infusion of 5% hypertonic saline (HS) on renal function, heart rate (HR) and arterial blood pressure (BP) in salt loaded rabbits. The renal and cardiovascular responses to these experimental treatments were then assessed following IV injection of olmesartan, a new Ang type 1 (AT1) receptor blocker. Both IV and IC infusions of Ang II at a rate of 10 ng/kg/min produced small reductions in urinary excretions of Na^+ and K^+, and total solute excretion (TSE). Only the reduction in K^+ excretion, induced by IC infusion of Ang II, turned out to be statistically significant. Infusions of Ang II via both routes induced moderate (elevations from 11-15 mm Hg.) but highly significant increases in arterial BP. The pressor response to IC infusion of Ang II was less profound probably due to interaction of some Ang with its receptors in central areas outside the blood brain barrier (BBB) before reaching peripheral circulation. Intracarotid infusion of HS induced highly significant increases in urine flow, Na^+ excretion rate and TSE. The urine excreted has become dilute, indicated by a significant reduction in urine osmolality. These renal responses were accompanied by consistent and highly significant increases in arterial BP. These findings may indicate that central hypernatremia causes the release of a brain natriuretic factor (BNF) with pressor activity. When Ang II was added to the IC infusion of HS, similar and more pronounced renal and BP responses were observed. Intravenous injection of olmesartan in a dose of 0.6 mg/kg produced essentially no change in arterial BP. Whereas the same dose induced clear-cut hypotension during IC infusion of Ang II. The pressor response to Ang was totally prevented by olmesartan. The hypotensive effect of olmesartan has disappeared after 30-60 min indicating a relatively short elimination half-life of the drug in rabbits. Intracarotid infusion of HS, shortly after IV injection of olmesartan, was still strongly effective in exerting diuretic, natriuretic and pressor actions. Since the AT1 receptors were blocked by prior IV injection of olmesartan and the HR remained unchanged during IC infusion of HS, the findings indicate no role of the BRAS or sympathetic stimulation in the pressor response to central hypernatremia, but a direct vasopressor effect of the postulated BNF is a likely mechanism.

Studies on Pulmonary Fungal infection in Hawler City. Effect of Salivary Histatin on Candida albicans

Name: Khonaw Kader Salh
Nature of the research: Academic
Degree: M.Sc
Specialty: Medical Microbiology
Date the discussion: 7/5/2006
Supervisor: Dr. Rassool.A. Dabbagh
                Dr.Abdul aziz.Y.Mansoor

Abstract

Incidence and prevalence of mycotic infection make it an important public health problem. Occurrences of mycotic infection have a rising tendency and most of the epidemiological studies investigate this problem in immunocompromised patient more than immunocomptent. This work is done through the period of one year Dec 2004 to Dec 2005.Two main lines of work were studied: First line comprises the incidence of fungal infection in patients with respiratory problem admitted to 3 hospitals in Hawler: A total of one hundred and twenty eight sputum sample from patients were included in this study, those patients suffering from respiratory disorders including asthma comprises highest rate 50 (39.10%), followed by chronic obstructive pulmonary disease (COPD) 39 (30%), pneumonia16 (12.5%), TB 12 (9.37%), acute bronchitis 8 (6.25%) and Cor-pulmonal 3 (2.34%). The incidence of fungal growth was highest in patients with chronic bronchitis followed by COPD. The age ranges from 18-90 years old. The age group (45-53 years old) showed the highest incidence of fungal infection. The lowest incidence was recorded with age group (27-35 years old). *Cryptococcus neoformans* was the most prevalent fungal infection 16(12.50) followed by *Candida albicans* 14(11.10%), *Cry. albidus* 4(3.12%), *Candida glabrata* 4(3.12%), and *Candida tropicalis* 3(2.40%). Incidence of disease was highest among males compared to female 1.8 **:** 1 Mycological examination revealed that 16 cases (12.5%) have positive sputum culture for *Cry. neoformans*. The incidence of *Cryptococcus* species other than *Cry. neoformans* was *Cry. albidus* 4(3.12%)*, Cry. Laurentii* 2 (1.56%), and *Cry. humicola* 2 (1.56%)*. Other yeast like fungi isolated was *Candida* species, 35 cases (27.34%) including 25(19.60%) *Candida albicans*, 5(3.90%) *C.glabrata*, 4(3.20%) *C. tropicalis* and 1(0.80%) *C.krusei*. Blood culture results showed positive for 21 cases of *Candida* spp. including 14(40%) *C. albicans,* 4(11.50%) *C. glabrata* and 3(8.60%) *C. tropicalis.* Results of our study showed that each of risk the factors such as age, smoking, rural occupations, other systemic illness, previous operation, hematological cancer, corticosteroids and chemotherapy agents may have direct effect on fungal infection. The second lines of this research include microbicidal activity of salivary Histatin: A total of twelve healthy persons and patients were included in this study, the results revealed that healthy salivary PH and flow rate (9.68%, 6.81%) were higher than patients' salivary PH and flow rate (5.86%, 5.58%) respectively. The candidacidal activity of salivary Hsts showed a marked increase in activity with increasing saliva volume. The antifungal activity of Hsts was 28% for 25µl; This activity increased to 65%, 80%, and 91.4% when were increased to 50µl, 75µl, 100µl we used respectively.Salivary Hst from healthy individual have profound effect on candidacidal activity; while patients saliva showed a defect in one or more activity. Log phase cell treated with healthy saliva showed (91.4%) loss of viability; while susceptibility of cells to this activity at stationary phase, showed (41%) loss of viability. Log phase cell treated with patient saliva showed only (73%); while at stationary phase revealed no effect on *Candida albicans.* It was found that fungicidal activity of saliva decreased with increasing sodium azide concentration, ionic strength of buffer, PH of buffer, and extracellular salt (monovalent and divalent salts such as NaCl, $MgCl_2$ and $CaCl_2$,). On the other hand increasing concentration provide protection against Hst killing activities; while

ZnCl$_2$ enhance *Candida* susceptibility to Hst killing which indicate that salivary Hst is a metallopeptide. At lower temperature (0°C) both saliva groups have no effect. At 30°C and 37°C saliva from healthy individual showed 80%, 91.4% loss of viability respectively; While patient's saliva showed 73%, 3% loss of viability respectively at the same condition. Reduction of the metabolic activity by respiratory inhibitor (sodium azide and an anaerobic condition) decreased the susceptibility of *C. albicans* to Hst killing. This indicates that active mitochondrial metabolism may sensitize cells to Hsts. Prospective study demonstrated that killing activities was partially inhibited when performed in an anaerobic condition; this may be due to trace amount of air present in jar.

A Study on Iron Status in Patients with Ischemic Heart Disease in Sulaymani Governorate

Name: Awaz Ahmed Kamal Shalli
Nature of the research: Academic
Degree: M.Sc.
Specialty: Hematology
Date the discussion:
Supervisor: Dr. Mohammad Salih Jaff

Abstract

There are growing epidemiological studies on iron status and coronary heart disease that have yielded conflicting results, with claims ranging from strongly positive associations to strongly negative associations. Our study was conducted on 120 ischemic heart disease patients (73 males, 47 females), and 100 control (70 males, 30 females) apparently healthy people, aged 32-90 years, in Sulaimani city, during the period from July to November 2005. Ischemic heart disease occurrence increased with age in both sexes being higher after 50 years than before 50 years (80% vs. 20%), and was more in males (60.8%) than in females (39.2%), with an increasing occurrence of the disease in post-menopausal women compared with premenopausal (89.4% vs. 10.6%). When evaluating the iron status, patients had lower iron stores than controls as measured by transferrin saturation (22.7± 12%vs. 31.3± 11.1%), and serum iron concentrations (76.9±37.2µg/dl vs. 99.5±33µg/dl). In conclusion, we found that body iron stores were not related to ischemic heart diseases.

Diagnostic and Molecular genetic Studies on the bacteria staphylococcus spp. Isolated from various clinical specimens

Name: Aso Ako mohammad
Nature of the research: Academic
Degree: M.sc
Specialty: Medical Microbiology
Date the discussion:
Supervisor: Assist. Prof.Dr. Khalid Daham Ahmed.

Abstract

Thirty isolates of Staphylococcus collected from different human clinical infections (urine, wound, nose, diabetic foot lesion, stool, mastitis, blood and ear swab) from Erbil–Teaching, Maternity and Pediatric hospitals and out patient clinics in Erbil city. The isolated bacteria were identified on the bases of cultural, morphological and biochemical tests using API-Staph system. Many different species were obtained of these, S. hominis, S. lentus, S. epidermidis, S .aureus, S. simulans, S. haemolyticus, S. sciuri, S. warneri, S. capitis and S. lugdunesis. Consequently, some phenotypic traits of isolated bacteria were studied. First, the isolates cultured and incubated at three different incubation temperature (30, 37, 43) ^{oC}, all the isolates show heavy growth at these temperature except three isolates S. hominis (1), S. capitis (17) and S. lugdunesis (22) from urine, wound and nose respectively, which failed to grow at 43°C, while at the same incubation temperature and in the presence of different antibiotics most of staphylococcal isolates reveal no growth. Second, the isolated bacteria screened for their resistance to sixteen commonly used antibiotics (ampicillin, cephalexin, ciprofloxacin, chloramphenicol, clindamycin, cloxacillin, erythromycin, gentamicin, lincomycin, methicillin, nalidixic acid, oxacillin, penicillinG, rifampcin, tetracycline and trimethoprime). The isolates appeared to be varied in their resistance to most antibiotics. High percents of resistance exist against most of these antibiotics but low percents of resistance appeared toward lincomycin and gentamicin. On the other hand, most of the isolates were sensitive to rifampcin and ciprofloxacin. In addition, all isolates were resistant to methicillin except S. simulans (6) and S. aureus (13) from urine sample revealed intermediate resistance. Third, most of the isolates were resistant toward heavy metal $CdCl_2$ and $HgCl_2$ at concentration 10 and 12.5 µg/ml, respectively, but the resistance disappeared when the concentration increased. Fourth, most of the isolates haven't grow on minimal agar media containing different sugars (galactose, arabinose, maltose, lactose) at concentration 0.2% (W/V)), while weak to moderate growth appeared on minimal media containing glucose, and non of isolates have been grown on minimal agar media containing arabinose at same concentration. For the purpose of mutagenesis processes four species were chosen (S. aureus, S. simulans, S. capitis, and S. scuiri) on the bases of their common source and resistant to most antibiotics, heavy metals, coagulase production and mannitol fermentation All these species showed spontaneous losing of some phenotypic traits understudy. The chemical mutagens, nitrous acid and MNNG were used for elimination of some phenotypic traits of mutagenized species and this occurs in two ways:

1- Using different concentrations with a certain treatment period.
2- Different treatment periods with mutagens with concentration that reveal high effect of mutation in the step 1.

In respect to nitrous acid in both ways the viability of colony count number were decreased reaching to more than 90% reduction. Different concentrations of nitrous acid with different treatment periods have observable effects on some phenotypic traits of four chosen species. The concentration of NA which used revealed various percents of losing of antibiotics and heavy metal resistance in all mutagenized species and also nitrous acid was effective in elimination of coagulase production and mannitol fermentation in S. simulans but in S. capitis

the treatment with NA gain the property of coagulase production. while in S. aureus and S. scuiri, both characters haven't been affected. The 0.4M conccentration of NA treatment appear to be lethal for S. simulans, S. sciuri and S. capitis but not for S. aureus. In addition, 40 min treatment period with NA showed remarkable losing of the above traits. Moreover, MNNG showed lower mutagenic effect on percents of reduction in number of colonies / ml of treated culture than NA on the same isolates. The effect of MNNG on above phenotypic traits was apparent. Although increasing the concentrations and treatment periods led to increase the percents of elimination, but no lethal dose detected of MNNG on bacterial species understudy.

Amblyopia in primary schools a prospe ctive study

Name: Morad Amir Ahmad
Nature of the research: Academic
Degree: M.sc
Specialty: Medical Physics
Date the discussion:
Supervisor: Dr. Abdul-Majeed Abdul-qadir.

Abstract

In this study 5736 students have been examined in Masif , Kore and bastorehs primary schools and also 40 villages around Masif and some primary schools in Shaqlawa district .260 students had Amblyopia and were taken to shaheed mulazin kareem hospital and optometry clinic in Masif. 159 students were examined in the optometry clinic. We open a file for each student by amblyopic eye. The recommendations put are to treat Kurdistan pupil in the Kurdistan pre-school (below 4 year) in order to minimize problems of amblyopia handicap disability and poor school performance. A prospective study of 5736 students aged below 16 years have been examined in masif during the period from August 2003 to January 2005. The aim of the study was to identify types and causes of amblyopia in the sample of Kurdistan region. 260 pupils had amblyopia out of 5736 pupils .Most of the patient were of low and middle social.

Studies
1. The prevalence of amblyopia in the primary schools is 4.5%.
2. The prevalence refractive error in the primary schools is 24.80%.
3. The health of the pupils was ignored by the parents. Further more, 38.84% in the total of 260 pupils were given prescription to take treatment, but most of them ignored as we have shown in this research.
4. Treating Amblyopia wasn't taken any importance in the primary schools as it should be.
5. Age is very important in treating Amblyopia.
6. The eye involved is randomly.

Hepatitis C virus infection in Erbil province; prevalence, diabetogenic role, and ALT activity profile

Name: Amin Aziz Bakir
Nature of the research: Academic
Degree: M.sc
Specialty: Medical Microbiology
Date the discussion: 5/2/2006
Supervisor: Dr. Saeed K Hussain

Abstract

In current cross-sectional prospective study the microbiological and epidemiological aspects of hepatitis C virus in Erbil province were approached using third generation ELISA method. The 1182 enrolled subjects were collected from risk groups including; 320 thalassemics, 20 hemodialysis, 32 parents of HCV-infected children, 233 blood donors, and 304 healthcare workers, in addition to 273 subjects that represented the general population; as well 98 diabetic sera tested for anti-HCV using 3rd generation ELISA method. Of these groups, ALT enzyme activity estimation was assessed in blood donors, general population, thalassemics, and diabetics. The results are summarized as following:

1- Anti-HCV seropositivity rates were; 32.2% among thalassemics, 15% in hemodialysis, 3.1% in mothers of HCV infected children, 2.04% in diabetics, 1.7% in blood donors, 0.0% in healthcare workers, and 0.36% among general population.

2- Anti-HCV seropositivity was higher in diabetic subjects than blood donors (2.04% *vs.* 1.7% respectively).

3- Coincidence of HCV and diabetes were more prevalent in thalassemics than general population (4.16 % *vs.* 0.36% respectively).

4- In thalassemics anti-HCV seroconversion after six months reassessment was 12.5%.

5- Anti-HCV seropositivity according to gender was statistically not significant.

6- Age was found as a fluctuating variable in relation to increasing anti-HCV seropositivity.

7- Increased anti-HCV seropositivity in both risk groups and general population in relation to history of jaundice (p < 0.0009).

8- Blood transfusion, parenteral drug injection, surgical operations were the most frequent risk factors associated with increased anti-HCV seropositivity.

9- Tattooing was a significant risk factor in anti-HCV seropositive blood donors.

10- Anti-HCV seropositivity among diabetics was associated with normal ALT activity profile and restriction to female gender.

11- ALT activity profile values were higher among blood donors than general population.

12- Frequencies of anti-HCV seropositivity with elevated ALT activity (> 45 IU) were 5 % and 20% in blood donors and thalassemics respectively.

The impact of carbohydrate intolerance on the health of children under 2 years of age in Erbil city

Name: Omer Ibrahem Ababakir
Nature of the research: Clinical
Degree: High Diploma
Specialty: Pediatric
Date the discussion:
Supervisor: Asst. Prof Dr. Abbas Abdulqadir Alrabaty

Abstract

A prospective study done at pediatrics teaching hospital in Erbil from first March 2006-31-August 2006 to review the stool PH and reducing substances in acute and chronic diarrhea, to evaluate the effects of CHO intolerance on the health of children under 2 years of age in Erbil city.

 *   The majority of positive cases (CHO intolerance) were below 1 year in both types of diarrhea.

*   Those patients with chronic diarrhea more susceptible to develop CHO intolerance.

*   Both sexes approximately affected but in chronic diarrhea appear more in male.

*   Vomiting was one of the common associated symptoms and the stool usually was watery in character.

*   The disease more common in those children on bottle feeding.

*   Dehydration more in those having acute diarrhea while mal nutrition more following chronic diarrhea.

*   The excoriation of buttock nearly always present due to acidification of the stool.

*   Anemia occurred more in those children under 1 year.

Bacteriological and Plasmid DNA Content Studies in *Proteus mirabilis* Isolated from Different Clinical Sources

Name: Suzan Muhsin Qarani
Nature of the research: Academic
Degree: M.Sc
Specialty: Medical Microbiology
Date the discussion: 7/5/2006
Supervisor: Asst. Prof Dr. Khalid Dahham Ahmed

Abstract

This study involved the collection of thirty isolates of *P. mirabilis* during three months (August to October, 2004) from different clinical human sources of infections (urine, diarrheic stool, ear swabs, wound swabs and diabetic foot lesion) in the Teaching, Maternity and Pediatric hospitals , public health and clinical laboratories in Erbil city. These isolates were identified according to cultural, morphological and biochemical tests. The results revealed that these isolates belong to *P. mirabilis*. All bacterial isolates were screened for resistance to twenty antibiotics (ampicillin, amoxicillin, amikacin, cephalexin, cefotaxim, ciprofloxacin, chloramphenicol, clindamycin, erythromycin, gentamycin, lincomycin, nalidixic acid, neomycin, pencillin G, pipracillin, rifampicin, streptomycin, tetracycline, trimethoprim and tobramycin). All isolates were completely (100%) resistant to ampicillin, cefotaxim, chloramphenicol, clindamycin, erythromycin, lincomycin, nalidixic acid, pencillin G, pipracillin, streptomycin, tetracycline and trimethoprim, while for amoxicillin, cephalothin, gentamycin, neomycin, rifampicin, the ratio of resistance were varied. But, all the isolates were completely sensitive to amikacin, ciprofloxacin and tobramycin. The gene dosage effect of antibiotics resistance were examined by increasing the final concentration of antibiotics reached to 256 folds in some antibiotics used. All isolates can tolarate high concentrations of most antibiotics used, these may indicate the presence of high copy number of plasmid R carrying these antibiotic resistance genes. The ability of these isolates to resist the heavy metals salts (mercury chloride and cadmium chloride) was studied by using different concentrations of these heavy metals and the results revealed that *P. mirabilis* showed a higher resistance to $CdCl_2$ than to $HgCl_2$. Also, all of the isolated bacteria that revealed resistance to antibiotics were resistant to heavy metals this may lead to presence of correlation between antibiotics and heavy metals resistance genes, which may be located on the same plasmid. On the other hand, the ability of isolates to utilize the different sugars and the results showed that all isolates were able to utilize of glucose and galactose, while all isolates unable to utilize of arabinose, lactose and maltose. For the purpose of removing some phenotypic traits in *P. mirabilis* isolates like: antibiotic, heavy metals resistance and swarming phenomenon which may be located on plasmid DNA in *P. mirabilis* isolates, both spontaneous and induced curing were examined by using different chemical agent like: Sodium dodecyl sulfate (SDS), drugs like: Nalidixic acid (Nal), physical agent like: elevated temperature ($44^{o}C$) and combined action of (SDS and $44^{o}C$) were used as curing agents. The rate of spontaneous elimination of drug resistance plasmid in tested bacterial cell was very low, while no spontaneous elimination of heavy metals resistance, swarming phenomenon, urease and H_2S production responsible plasmids was recorded. Moreover, Among different concentrations of SDS used (0.01, 0.03, 0.05, 0.1 and 0.5) %(w/v), the 0.01%(w/v) was the most effective one on viability of colonies counter and on removing of plasmid DNA content that encoding antibiotics and heavy metals resistance, swarming phenomenon, urease and H_2S production, so the lower concentration of SDS was more effective than high one and the effect of SDS seems to be more effective in stationary phase than logartmic phase. Furthermore, elevated temperature ($44^{o}C$) recorded the higher effect in removing of antibiotic, heavy metals resistance, swarming phenomenon, urease activity and H_2S

production when it is used as curing agent. Also, the combined action of SDS and elevated temperature resulted curing effect but in lower rate than using of SDS and elevated temperature alone. Moreover, the using of drugs Nal not showing remarkable curing effect of plasmid DNA content in *P. mirabilis* isolates. The concentrations of DNA librated from the cells after curing them with different curing agents were estimated and the results revealed that treatment with SDS (0.01%)(w/v) till stationary phase was the most effective one among the used curing agents. The elevated temperature was also have role in lysis of cells but at lower rate. In order to know the effect of curing agents used in this study on the plasmid DNA synthesis in treated isolates, extraction of DNA from control and treated colonies were carried out and the yield of plamid DNA content estimated. Generally, all used curing agents were able to reduce the synthesis of DNA but in various rates. The most effective curing agents in this purpose is the elevated temperature which can reduce the yield of plasmid DNA reached to 91%, while SDS, Nal and combination of SDS and elevated temperature can reduce the yield of plasmid DNA in ratios (55.26, 41.61 and 19.07)% respectively.

Frequency of the ABH blood group antigen secretors among kurds

Name: Faisal Arab Hamad
Nature of the research: Academic
Degree: M.Sc
Specialty: Forensic medicine
Date the discussion: 5/12/2006
Supervisor: Asst. Prof Dr. Mohamad Salih Jaff

Abstract

As the blood group antigen are permanent, fixed and life long biological markers of any individual, they have been used in the detection and identification of suspects of crime perpetrators, because blood and other body secretion are frequently found in crime scenes or on the properties of both victims and perpetrators. After the discovery of these antigens in the secretions of most people, body fluids other than body became the source of evidence in the processes of criminal investigations. In generally known that about 80 % of the world population are secretors and only 20 % are non-secretors of the ABH antigens into body secretions, but, as different studies conclude, there are some racial differences. In this study we examined and analyzed salivary secretion of (565) kurds of both sexes who selected randomly from different locations of Iraq Kurdistan region, in order to determine the frequency of ABH blood-group antigen secretors. The test and the results will be used, afterwards, in the process of the investigation of criminal acts to aid courts in Kurdistan region of Iraq for the detection and identification of criminals.

The result of the study showed that (79.5%) of kurds are ABH blood-group antigens secretors and (20.5%) of them are non-secretors. This showed a very little difference from the population of the world so far investigated and known to us. The frequency of secretors of each specific ABH blood group antigen were calculated according to sex and Rhesus blood group systems which showed no differences in both sex and Rhesus types (p=0.99 and 0.88 respectively). Our results were similar to other studies performed elsewhere around the world.

The application of ultrasonography to distinguish between benign and malignant solid breast masses

Name: Hayam Yousuf Awdish
Nature of the research: Academic
Degree: M.Sc
Specialty: Clinical Radiology
Date the discussion:
Supervisor: Asst. Prof. Dr. Isam Ali Al-Hatam

Abstract

A breast mass is the first symptom in over 80% of all patients with cancer of the breast. Consequently, the finding of any mass in the breast is a highly significant and warrants a thorough investigation. This study was undertaken to study the validity of ultrasound in the evaluation and differentiation of solid breast masses into benign or malignant by determining the sensitivity, specificity, positive predictive value, negative predictive value and accuracy of ultrasound in distinguishing a malignant mass. The study was conducted at Rizgary teaching hospital, Erbil. Sixty-one female patients with eighty-five solid breast masses underwent ultrasonography of the breast and the masses were 'classified according to Stavros criteria of sonographic classification of solid breast masses, as benign, indeterminate or malignant and were followed up and compared with either Excisional Biopsy or Fine Needle Aspiration Cytology under ultrasound guide. The mean age group was seen to be 33 years. The youngest patient was 12 years old and the oldest was 58 years. The validity of ultrasonography in the differentiation of breast masses was calculated. A sensitivity value of 100%, specificity of 59.32%, positive and negative predictive values of 52% and 100% respectively with accuracy of 71.76% were noted and were compared to other similar studies. Among the multiple ultrasonographic parameters, all were significant in the diagnosis of benign versus malignant masses except calcification and the maximum diameter. The angular margin characteristic; or what has been previously described as jagged margins, was found to have the greatest individual sensitivity. This study shows that sonography is useful in characterization of some solid masses, it must re-emphasized that these results are predicated on valid targeted indications; good sonographic technique (radial and antiradial scanning) and strict adherence to the criteria for a benign lesion. Attention must be paid to combinations of sonographic features rather than any single characteristic, any focal ultrasound abnormality should undergo needle biopsy.

Value of MRI examination in comaprision to clinical diagnosis in acute injury of knee joint with normal knee radiograph

Name: Haveen Azo Mohammed Amin
Nature of the research: Academic
Degree: M.Sc
Specialty: Clinical Radiology
Date the discussion:
Supervisor: Dr. Saeed Nathim Younis

Abstract

This is a prospective study carried out to show the value and importance of MRI in evaluation of soft tissues and bone changes in acute injured knee joint in patients who had normal knee radiographs. The study was conducted at Rizgary teaching hospital, Hawler from May 2005 to November 2006. Sixty five patients were examined using 0.2 Tesla magnetom (Siemens Erlangen/Germany). Tl, T2 sagittal and Tl coronal images areused for examination. Most of cases were referred to MRI section according to special form and examination was done within 7-14 days after trauma. Out of the 65 patients who were included in this study, 70% were male and 30% were female, 58% right side and 42% left side injury. Their age ranged from 17-59 years and their occupation were: 30% students (all male), 23% housewives, followed by athletes (all male), teachers, self-employed, police, engineers, employers, physicians and drivers. Sport activities found in 67% of cases, fall on ground in 25%, fall from height in 5% and road traffic accidents in 3%. Knee injuries in females were found to be with fall on ground in 70% of cases, sport activities in 20% and fall from height in 10% of cases. In male, sport activities were the major cause comprising 88% of cases. The remaining included fall on ground in 5%, road traffic accidents in 5% and fall from height in 2%. This study showed that trauma in connection with sport activities was the only cause in patients less than 20 years of age. Sport activities accounted for 81% of cases in age group 20-29, 56% in age group 30-39, 80% in age group 40-49. Fall on ground was the major cause in older age groups 86% and fall from height in 14%. A wide range of pathological findings were reported. Medial meniscus (MM) changes found in about 92% of cases, anterior cruciate ligament (ACL) lesions in 32%, MRI positive effusion in 75%, lateral meniscus(LM) lesions in 41%, bone changes in 18%, bone contusion in 14%, bone islands in 17%, and less than 7% meniscal cyst, Baker's cyst, bone cyst, osteochondral fracture, bone necrosis and bone infarction. Thirty seven percent of patients were found to have MM tear and the posterior horn was involved in all cases; anterior horn injury was found in only 4%. Types of tear were found to be vertical in 75%, radial in 17%, complex in 4% and arc in 4% of cases. Bucket-handle tear was found in 6 cases of vertical tear. Fifty six percent of cases that showed combinations had vertical tear'and degenerative changes, 26% radial and degenerative, 9% vertical and horizontal and in 9% horizontal and radial. Seventy two percent of cases showed degenerative changes in the MM in different grades and combinations. .Three grades of MM lesions were identified: 20% were Grade (1) 40%, Grade (2) 22%, Grade (3) and 18% combined. Twenty nine percent of cases of MM tear were found to be associated with ACL tear. LM tears were reported in 15% of patients. All located at the posterior horn. Fifty percent of LM tears were vertical, 40% radial and 10% of complex type. Three grades were identified in LM lesions: Grade (1) 48%, Grade (2) 15% and Grade (3) 37%, and 50% of cases of LM tear were found to be associated with ACL tear. ACL injuries were reported in 32% of cases, out of these 33% had complete ACL tear while 67% partial tear, and also showed ACL tears were associated with bone contusion, lateral femoral cpndyle (LFC) was involved in 57% of cases, lateral tibial plateau (LTP) in 29% and medial femoral condyle (MFC) in 14%. Bone contusion was most commonly associated with complete ACL tear. Only 14% of cases were associated with partial ACL tear. Three types of bony changes were identified: Type (1) 75%, Type (2) 8% and Type (3) 17%. Around 1/2 of cases of bony changes found to have complete ACL tear.Comparing clinical findings with MRI findings

showed that 32 cases had MRI-positive effusion that could not be detected clinically. All MRI-positive MM tears were suspected clinically except one patient. Six cases of 10 MRI-verified LM tears were suspected clinically. Thirteen out of twenty MRl-positive ACL tears were clinically suspected. The sensitivity of clinical diagnosis of MM, LM and ACL tear was 95%, 50% and 38% respectively while specificity for MM, LM and ACL was 12%, 98% and 88%, respectively. This study concludes that MRI examination in cases of knee injury remains an important non-invasive tool in support of clinical examination in clarifying the diagnosis and assessing the extent of knee injury and also helps in detecting other internal lesions that could be difficult to diagnose clinically and helps in avoiding invasive diagnostic methods such as arthroscopy and to diagnose bone contusion that cannot be seen or verified by other diagnostic, meth

Value of comuted tomography in stroke

Name: Aras Rafiq Abdulla
Nature of the research: Academic
Degree: M.Sc
Specialty: Clinical Radiology
Date the discussion:
Supervisor: Asst. Prof. Dr. Saeed Nathim Younis

Abstract

This is a prospective study, where   CT scan was done on   101 patient referred for CT scan of the brain at Rizgary Teaching Tospital from February 2005 to September 2006 ,with a provisional diagnosis of stroke. The patients were randomly selected during different stages of stroke from few hours to months after the insult. CT examination was carried out using Siemens Somatom Emotion 130 kv, 260mAs, slice thickness of 5 mm, pitch 1.5.A1I the patients were examined with out the use of contrast media. The total number of patient examined in our study was 101 patients, the male (47patient) to female (54patient) ratio was nearly the same, with a slight female predominance, 67.3% of patient was shown to have infarction (68 patients).While 17.8% was having intracerebral hemorrhage either alone or with subaraehnoid extension, 1% was found to have pure subaraehnoid hemorrhage, and in 13.9% the CT scan were normal. The MCA was the most common artery involved 63.4%, followed by PCA 9.9% followed by both ACA.MCA 5.9% .The ACA was the least commonly involved artery 2%. The parietal area was the most common area affected 19.8%followed by the basal ganglia 17.8%. The left side of the brain was twice commonly affected 55.4% than the right side 25.7%, both side involved in 5%. Focal neurological deficit was the most common presenting symptom 33.7%, followed by change in the level of consciousness 25.7%. Hypertension and diabetes mellitus alone or in combination with other risk factor were the most common risk factors.

Pharmacological and antimicrobial studies on aqueous extract of salix babylonica

Name: Susan Abdulkader Farhadi
Nature of the research: Academic
Degree: M.Sc
Specialty: Pharmacology
Date the discussion:
Supervisor: Asst. Prof. Dr. Kawa F. Dizaye

Abstract

Salix babylonica is a well known tree in the herbal medicine world ::r many of its effects like analgesia and antipyrexia. One of the active constituents of this tree is also well known but in the conventional medicine world which is Aspirin. In this study, the pharmacological. properties of this plant are evaluated. Salix babylonica produced no vasodilatation on isolated pulmonary vessel of the rabbit. Besides it could not reverse the vasoconstrictor effect of phenylephrine. Therefore it can be concluded that the plant extract has no vasodilator effect. The aqueous extract of this plant produced no change on isolated bronchial smooth muscle of rabbit. From this it can be assumed that it has no effect on histamine and adrenergic receptors. Tie result obtained from its effect on human myometrium was a relaxation which could be explained by inhibition of PG synthesis. Salix babylonica has no detectable effect on movement of jejunal muscle; moreover it could not reverse the contraction that was by produced by pilocarpine and histamine. These indicate that this plant "either agonist nor antagonistic effects on both histaminic and .J receptors. This plant extract could not inhibit the growth of Staph E.coli, Pseudomonus aeroginosa and Candida albicans on a d sensitivity test. Salix habylonica extract produced a significant increase in urine and urinary' Na^+ and K^+ excretion rates in rabbits. This effect could be attributed to its inhibition of Na^+/Cl^- co-transport system in the distal tubule. In experimental rats the plant extract produced a profound drop in pressure associated with increased heart rate. This hypotensive might be due to the diuretic property, while the increased heart rate could be a reflex mechanism through baroreceptors.

The influence of exercise training on body mass index, lipid and lipoprotein profiles

Name: Salim Khalid Muhammed
Nature of the research: Academic
Degree: M.Sc
Specialty: Clinical Biochemstry
Date the discussion: 20/10/2007
Supervisor: Asst. Prof Dr. Tayfoor J. Maamoud

Abstract

The present study was conducted during the period between November 2006 and April 2007 to evaluate the influence of prolonged exercise training on BMI, lipid and lipoprotein levels and to determine what association exists between these parameters. Blood samples were collected from 99 students (64 males and 35 females) of fourth year/ College of Physical Education/ Salahaddin University. The average age was (22.81±0.132 Mean±S.E.M) years and the range of age was (21−26) years. These students were underwent to prolonged exercise training program five days/week and each training session lasted 2−3 hours/day. The results obtained were compared with those of a control group consisted of 94 students (63 males and 31 females) of fourth year/ Medical Colleges (Medicine, Dentistry, Pharmacy and Nursing) / Hawler Medical University. Control volunteers are of the same average and range of age and they were not undertaken to prolonged exercise training program. The data obtained indicate that there was a non significant decrease in mean of BMI of exercise group compared with control group. While prolonged exercise training resulted in a significant decrease in the serum levels of TC (Total Cholesterol), TAGs (Triacylglycerols), VLDL (Very Low Density Lipoprotein), LDL-C (Low Density Lipoprotein-Cholesterol) and TC/HDL-C ratio and a significant increase in the serum level of HDL-C (High Density Lipoprotein-Cholesterol). On the other hand a positive correlation was found between BMI and the mean serum levels of TC, TAGs, VLDL and LDL-C and TC/HDL-C ratio, whereas there was a negative correlation between BMI and HDL-C in both control and exercised groups. Our results clearly showed that regular exercise training may be particularly helpful for individuals with obesity, low HDL-C and elevated TC, TAGs, VLDL and LDL-C.

Relation of prostate specific antigen and histopathology of prostate biopsy

Name: Payman Anwar Rashid
Nature of the research: Academic
Degree: M.Sc
Specialty: Pathology
Date the discussion: 10/11/2007
Supervisor:

Abstract

Prostate cancer is now the commonest cancer in men and the second commonest cause of cancer death after lung cancer. The introduction of prostate specific antigen (PSA) testing has revolutionized the early detection, management and follow up of patients with prostate cancer and it is considered to be one of the best biochemical markers currently available in the field of oncology.

This prospective study was aimed to:

1. Evaluate the diagnostic performance characteristics of prostate specific antigen (PSA) value with histopathological finding to prostate biopsy.
2. Determine the relation between PSA and Volume prostatic disease conditions.
3. To explain effect of age and prostate volume on PSA testing.

To fulfill this objectives, 92 specimens of prostate biopsy from patients with history of prostatism who underwent prostate surgery (prostatectomy, TURP and true cut biopsy of prostate) with samples of serum for tPSA analysis taken preoperatively during a period of 10 months. In addition to 33 samples of serum taken from apparently healthy individuals for tPSA analysis. From 92 cases 12 of them were malignant, 49 case were BPH and 31 cases were BPH with prostatitis. Statistically there was significant relation between PSA values and histopathological finding of prostate biopsy and significant relation between age and PSA value apparently healthy individuals. Sensitivity of PSA testing was better than specificity. It is concluded that PSA evaluations is a sensitive marker for prostate cancer but because of various other conditions that affect serum PSA concentration, other methods of investigations such as DRE, TRUS and histological examination should be combined to confirm diagnosis.

Prevalence and Etiological Classification of Thrombocytopenia among a Group of Pregnant Women in Erbil City

Name: Rawand Pouls Shamoon
Nature of the research: Academic
Degree: M.Sc
Specialty: Hematology
Date of the discussion: 10/11/2008
Supervisor: Senior Lecturer Dr. Nawsherwan Sadiq Muhammed

Abstract

Thrombocytopenia occurring during pregnancy is a common diagnostic problem. This study intended to determine prevalence, define etiologies of pregnancy-associated thrombocytopenia and to identify clinical and laboratory indicators to commence further investigation over thrombocytopenia pregnant women. During 9 months, from 15th Nov. 07 to 15th Aug. 08,850 pregnant women at different ages of gestation were screened for presence of thrombocytopenia in Erbil Maternity teaching hospital. A control group of 150 age-matched no pregnant apparently healthy women were tested for platelet count. Thrombocytopenia pregnant women were followed up, their neoborns were tested with in 36 hours of delivery and reassessment of platelets was done for the women within 7-10 days post delivery. The mean platelet count in pregnant was significantly lower than in no pregnant women (221±59.9 vs 273±66.9). Thrombocytopenia affected %8 of them were mild, and gestational thrombocytopenia was found to be the principle cause (73.8%) that requires no management. Hypertensive disorders caused C in 23% of cases and tow cases (4%) were due to ITP. No maternal and /or fetal complications were noted. The incidence of thrombocytopenia was significantly higher among women in the third trimester. Maternal parity had some effect, however not significant. Medical and obstetrical risks including maternal anemia had no significant influence on the incidence. The mean platet count of 51neoborns of thrombocytopenic women was (240±7.1).Two neoborns (4%) had low platelet counts. Majority of pregnancy thrombocytopenias were mild and occurred in the last trimester of pregnancy. No maternal or neonatal bleeding complications were observed .gestational thrombocytopenia and pregnancy hypertensions were the major causes.

Ultrasonographic measurement of normal splenic parameters in Erbil population

Name: Zana Mustafa Mahmood
Nature of the research: Academic
Degree: M.Sc
Specialty: Anatomy
Date of the discussion: 9/2/2008
Supervisor: Asst. Prof. Dr. Fareed Hana Abdul-Ahad

Abstract

Five hundred and twelve healthy looking Erbilian subjects have been examined sonographically in Erbil city for their splenic length, width, thickness and volume, ranging from 10-73 years old, (254 males and 258 females). The present study showed that the upper normal limit of spleen length for adults was (12.54cm) which is slightly different from the international standards. The width, thickness and volume showed an irregular change with age. The length increased till age (31-35) reaching a peak there then declined significantly in old age. Males' spleens were significantly larger than females. Age had very poor correlation with different splenic parameters. Body surface area (BSA), weight, height and body mass index (BMI) had a moderate correlation with the splenic parameters. BSA showed the best correlation in both sexes which can be used as a reference for splenic size assessment.

Physical evaluation to direct digital and conventional intra oral radiography

Name: Niaz Salih Abdullah
Nature of the research: Academic
Degree: M.Sc
Specialty: Medical physics
Date of the discussion: 16/11/2008
Supervisor: Asst. Prof. Dr. Amir D. Al-Dabbagh

Abstract

The purpose of this study is to compare the physical evaluation of two kinds of digital (IMS, Planmeca) with (CCD) array systems for dental radiography and comparing these with intra-oral conventional radiography. The samples were divided into two groups depending on exposure times. The first group include the useful range of exposure times, which range at (0.3, 0.4, 0.5 sec.) for conventional radiography, and at (0.07, 0.08, 0.09 sec.) for digital IMS, and at (0.040, 0.050, 0.064 sec.) for digital Planmeca. In the second group, a wider range of exposure times was adapted, where from (0.1 – 1.1 sec.) for conventional radiography, and from (0.04 - 0.14 sec.) for digital IMS, and from (0.010-0.100sec.) for digital Planmeca radiography. A dosimeter was used to measure the radiation exposure for both systems at different exposure times.Seven dental specialist, three radiologist, three oral surgeon, and one periodontologist examined and evaluated the image quality of radiographs for both systems based on three main factors density, contrast, and sharpness. The methods adapted for the measurement of these three factors (density, contrast, sharpness) were as follow:

1- Density for conventional radiography was measured by densitometer, and by observer scores for both systems.

2- Contrast was measured by using an aluminum step-wedge for both systems depending on observer scores.

3- Sharpness by using a brass grids of different aperture sizes from (0.035 To 0.841mm.), which were measured by traveling microscope in normal and conventional radiography, and by computer in digital IMS radiography, and digital Planmeca radiography. The image quality for teeth radiographs in both systems was measured depending on observer scores.

The results of this study showed the following:

1- A significant reduction in radiation exposure for digital (IMS) radiography when compared to the conventional radiography, the reduction in radiation exposure is about (76.2%) at useful range of exposure times and about (80.4%) at all exposure times in digital radiography. While in digital (Planmeca) radiography the reduction in radiation exposure is about (99.5%) at useful range and about (99.6%) at all exposure times when compared to the conventional radiography.

2- At useful range of exposure times the image quality of conventional radiography according to density, contrast, sharpness was better than digital (IMS, Planmeca) radiography without manipulation.

3- With manipulation, digital (IMS, Planmeca) radiography and at the same useful range of exposure times perform equal in image quality when compared with conventional radiography.

4- At all exposure times, conventional radiography showed better results in image quality than that of digital (IMS, Planmeca) radiography without manipulation.

5- At all exposure times, digital (IMS, Planmeca) radiography with manipulation showed better results in image quality than that of conventional radiography.

6- Digital (IMS, Planmeca) radiography with manipulation showed better resultes in image quality than that of digital images without manipulation at both useful ranges and at all exposure times.

7- Finally, conventional radiography possessed more resolution power than that of digital (IMS, Planmeca) radiography according to measurements of smaller grid sizes.

Study of magnification and distortion for periapical radiography in parallel and bisecting angle techniques

Name: Biyan Sabir Ebrahim
Nature of the research: Academic
Degree: M.Sc
Specialty: Medical physics
Date of the discussion: 2/12/2008
Supervisor: Prof. Dr. Abdul-Redha S. Younis

Abstract

This study has been done in vitro on real teeth samples and the following measures has been assessed:-
1.The effect of two different changeable (object film distance and film angle) and the relative magnification, have been calculated using long and short cone contribution, two techniques (parallel and bisect angle technique), also, were used, to compare between actual object and its radiographic image size, and to study magnification in both technique.
2. The effect of exposure time on x-ray film density in long and short cone, and to compare between x-ray film density in both techniques.
3. The effect of source surface distance on the x-ray film density at constant exposure time.
4. Surface radiation dose from x-ray exposure was calculated by using Edmonds Equation to compare between surface dose in long and short cone technique. Data have been collected according to the score conducted for this study and statically analyzed using t-test and *P value*. In conclusion, it should be note, that short cone technique caused less exposure than long cone for diagnostically acceptable periapical radiographs, but this is less obvious for preferred radiographs. With radiation to get the optimum diagnostic information can gained through a reasonable exposure time since at certain exposure time the density of x-ray film will be constant then any extra radiation dose will cause a risk in radiation protection purposes.

Liability to Cervical Spondylosis Among Group Of Computer Workers In Erbil City

Name: Zekra Ali Aziz
Nature of the research: Clinical
Degree: High Diploma
Specialty: Rheumatology
Date of the discussion: 9 /10/2008
Supervisor: Dashty Abas Al.Bustany

Abstract

Objective: Neck pain due to poor posture, if neglected for long time , can lead to development of the cervical spondylosis.A knowledge of such aggravating factor helps in the management of it.This study designed to analysis the relation between symptoms and signs originating from the cervical spine and the duration of working on the computer.
Design: A comparison of a group of male subjects who work on computer with those who do not work on computer whose ages range between (30 - 50)
years was done for liability of cervical spondylosis. Any subject whose BMI is more than $25Kg/m^2$ was excluded. Likewise any subject with recognized evidence for predisposition to develop spondylosis was excluded.
Setting: Employee from different establishments in Erbil City (200 Subjects), over a period of six months starting on January / 2008 were included in the study.
Participant: Ninety nine subjects who practice computer work and hundred and one not computer working.
Interventions:
Subjects were subdivided into:
First group: Computer working.
Second group: Not computer working.
Both groups had been duration of occupation range between four to sixteen year and hours of working/week range "Between" twenty two to thirty two.The ninety nine subjects who work on computer each of them was evaluated for computer work station and asked about his posture during working on computer and asked if he take a break time when he work for long hours. The difference between comparable subdivisions of the studied subjects was tested by the Chi-squared test concerning the frequency of spondylosis in each of them.
Result: Affection of the cervical spine by spondylosis was statistically significant among those who work on computer (P< 0.05).
Conclusion and recommendation: Long term working on computer with bad posture and with out break time increase liability for developing cervical spondylosis in comparison of(same age group ,same duration of occupation ,and same hours of working) but not work on computer. For that reason should pay attention to posture and take a break time during working on the computer for long hours during long period.

Body Iron Status in Blood Donors in Erbil

Name: Sanabil Slewa Babka
Nature of the research: Academic
Degree: M.Sc
Specialty Hematology:
Date of the discussion: 26/11/2008
Supervisor: Assistant Professor Dr. Dr. Mouroge Hashim Al-Ani

Abstract

Blood donation leads to substantial iron loss, if not compensated for efficiently, the iron loss may eventually lead to anemia. Over a period of 6 months, 489 healthy looking adult males, attending blood bank department in Nanakaly hospital for blood donation were studied, their ages ranged between 18-54 years. Venous blood samples were collected from each. A complete blood picture, serum iron parameters and serum ferritin level were performed. According to the frequency of donations; donors were divided into: first time donors (never donated before) and repeated donors, the later were further sub grouped into multiple donors (2-4 times /2 years) and frequent donors (more than 4 times/ 2 years). Ninety one donors (18.6%) were found to have laboratory evidences of iron deficiency. All iron deficient subjects were repeat donors. Among multiple donors, the frequency of iron deficiency was (20.5%) which increased to (26.7%) among frequent donors. The frequency of iron deficiency was positively related to the frequency of blood donations (p<0.001). The frequency of early stages of iron deficiency was higher among multiple donors (store depletion 47.9%, IDE 47.9%, compared to 37.2% store depletion and 44.2% IDE among frequent donors) while the incidence of IDA was higher among frequent donors (18.6% versus 4.2%, p=0.01). With the exception of MCV, which was inversely related to the frequency of donations, other routine hematological parameters including Hb and PCV showed no association neither with serum ferritin nor with frequency of donations, however, serum iron and transferrin saturation were positively associated with serum ferritin levels. It was concluded that iron deficiency is common among repeat donors in our locality and that this deficiency worsens with increasing frequency of donations. Repeat donors need to be followed up, their iron status has to be assessed and when necessary to be supplemented with iron.

Pattern of different types of viral wart in patients attending the department of dermatology and venereology at Rizgary teaching Hospital in Erbil

Name: Ronak Saeed Ahmed
Nature of the research: Clinical
Degree: High Diploma
Specialty: dermatology and venereology
Date of the discussion: 18/5/2008
Supervisor: Dr. Intiha Mohammed Almously

Abstract

Background: Viral warts represent a common dermatological disease encountered in daily practice. They are caused by Human Papillomaviruses (HPVs).Primary clinical manifestations of this virus infection include common wart, planter wart, flat wart and genital warts. Most infections are asymptomatic and transient, transmission occur by direct and indirect contact and predisposing factors include disruption to the normal epithelial barrier.Treaetment may be difficult with frequent failures and recurrences.

Objective: The aim of this study was to review the pattern of different types of viral wart in patients attending the department of Dermatology and Venereology at Rizgary Teaching Hospital in Erbil.

Patient and methods: This is a descriptive study-review of cases was conducted on 240 patients with different types of viral wart attending the department of Dermatology and Venereology at Rizgary Teaching Hospital in Erbil. Data were collected from October 2006 to April 2007. All ages and both sexes were included in the study.A questionnaire was prepared and full history and a thorough examination was done for each patient.

Results: From 240 patients enrolled in this study 270 cases with different types of viral wart were concluded. Common wart was the most common type of viral wart (48.9%) compared to planter wart (20.7%) plane wart (13%), genital wart (11.1%) and filiform wart (6.3%).There was a gradual increase in the frequency of cutaneous viral warts with increasing age from (6) to (24) years old .Genital wart was found to be more common between (18-36) years old. No gender difference found between different types of cutaneous viral warts. Dorsum of the hands (27.4%), face (16.3%) and dorsum of the feet (14.8%) were most common areas to be involved in cutaneous viral warts. Genital area involved in (73.3%) of cases with genital wart, both genital and perianal area involvement was found in (26.7%) of patients. In relations of different types of viral wart with different occupations, butchers and meat handlers were not found and total of (50%) of different types of viral warts were found among students. Total of (10.0%) of cases with cutaneous viral warts presented between (36-120) months duration. No complaint was found in (49.3%) of total cases of viral warts. All the cases of viral warts were found among clinically healthy individuals.

Conclusion: viral warts are common dermatological diseases among patients attending the department of Dermatology and Venereology at Rizgary Teaching Hospital.

Iron status in parents of β-thalassemia major patients in Kurdistan region of Iraq

Name: Mohammed Dhahir Ali
Nature of the research: Academic
Degree: M.Sc
Specialty: Hematology
Date of the discussion: 20/12/2008
Supervisor: Dr. Ahmed Khudair Yaseen

Abstract

Thalassemia syndromes are not infrequent in Kurdistan and Iraq. Our area has one of the highest prevalence of β-thalassemia carrier. People with β-thalassemia minor have a similar blood picture of hypochromic microcytic red cells as iron deficiency anemia. They are not necessarily iron deficient, although both can co-exist. The iron status in β-thalassemia minor has not been studied in Erbil city. The aim of this study was to know the iron status represented by serum iron, total iron binding capacity (TIBC), transferrin saturation and most importantly serum ferritin in this group of people. We recruited 202 parents of β-thalassemia major patients, attending thalassemia center in Erbil. Complete blood picture, blood smear, and iron study were done. Result was compared with 200 age and gender-matched section of the population as control who were first-timer blood donors and the staffs of the Nanakaly and Rizgari Hospital for female control. Hemoglobin level and blood indices were significantly decreased ($p<0.001$) in β-thalassemia minor parents, with exception of red cells count which was significantly higher as compared with the control subjects ($p<0.001$). Serum levels of iron, transferrin saturation and ferritin, were all increased significantly ($p<0.001$) in β-thalassemia minor parents compared with the control group. In general β-thalassemia minor parents showed increase in the level of serum ferritin. From this study we can conclude that, body iron in β- thalassemia minor parents is higher than normal control, with occasional cases of overt iron overload.

Detection of Insulin Resistance in Overweight & Obese Individuals

Name: Fargeen Ezzaddin Abdullah
Nature of the research: Academic
Degree: M.Sc
Specialty: Clinical Biochemistry
Date of the discussion: 20/12/2008
Supervisor: Lecturer Dr.Leweza B. Abbass

Abstract

Insulin resistance is the inability of body cells to use insulin in the uptake of blood glucose. Insulin resistance is more common in overweight and obese individuals and is associated with increased risk for type II diabetes mellitus and cardiovascular disease.The present study has been achieved during the period between November 2007 and March 2008 to evaluate the ability of metabolic markers associated with insulin resistance and increased risk for type II diabetes to identify the subset of overweight and obese individuals who are insulin resistant. Blood samples were obtained from 60 overweight and obese individuals 30 males and 30 females. The average age was 41.86 ± 0.98 years (Mean ± S.E.M) and the ranges of age were (30 – 66) years. The results obtained were compared with 30 normal weight individuals 15 males and 15 females. The average age was 37.6 ± 1.62 years (Mean ± S.E.M) and the ranges of age were (30 – 65) years. All individuals had no diabetes, they were apparently healthy individuals. The data obtained indicate that there was a significant abnormal rise in most blood tests including insulin level, triglyceride levels, and ratio of triglyceride to HDL-C in overweight and obese individuals than in normal weight individuals. The tests that were most useful for identifying individuals who had insulin resistance were fasting blood glucose, insulin and lipids concentrations. The lipid tests included total cholesterol, high density lipoprotein cholesterol, and triglyceride.

Isolation and Identification of Poliovirus From Wastewater and Stool of Children In Erbil City

Name: Dilshad Abdulla Hassan
Nature of the research: Academic
Degree: M.Sc
Specialty: Medical Microbiolog
Date of the discussion: 14/10/2008
Supervisor: Senior lecturer Abdul-Latif M.Ahmed
               Professor dr. Tariq Al-Hadithi

Abstract

Oral poliovirus vaccine immunization has contributed greatly to the poliomyelitis eradication programme. However, when the circulation of wild strains seems to have been interrupted, it is necessary to consider the possibility of the circulation of vaccine-derived virus. Aims of the study were poliovirus isolation and identification from sewage and stool specimen. Determination the prevalent type of poliovirus and measuring the sensitivity of cell lines in isolation of the poliovirus. Study the efficiency of the passive hemagglutination test in the detection of poliovirus. Stool from children less than five years old and sewage samples collection was begun during the third week after the second national immunization campaign-2007.Virus isolation and identification were performed using both tissue culture and passive hemagglutination inhibition techniques. A virus particle was isolated from stool (59.9 %) and sewage (42.9%) samples. Male female ratio was 1.02:1.High rate of poliovirus shedding (71%) observed in children less than one year. L20B cell line revealed highest rates (90.5%, 81.5%) of virus isolation from stool and sewage samples respectively. Isolates were identified as poliovirus (82.8 %, 68.2%) and non-poliovirus (17.2 %, 31.8 %) for stool and sewage samples respectively by neutralization test. By using Enzyme-linked immunosorbent assay into type 1 (68%), type 3 (32%) and no isolate of type 2. Number of poliovirus detection by passive hemagglutination inhibition test was 76(92.7%) from total (82) positive stool samples and 10(71.5%) from 14 positive sewage samples. It can be concluded from this study; that L20B cell line was the more sensitive cell line for poliovirus isolation. Passive hemagglutiation inhibition test cab be used as screening test for rapid detection of poliovirus from samples. Sewage sampling can be a sensitive supplement to acute flaccid paralysis surveillance.

Prediction of bone marrow cellularity from aspiration as compared to trephine biopsy

Name: Saran Abdulkader Noralden
Nature of the research: Academic
Degree: M.Sc
Specialty: Laboratory Hematology
Date the discussion: 1/12/2008
Supervisor: Asst. Prof. Dr. Anwar Sheikha

Abstract

Bone marrow examination is a vital part of the hematology practice. Unlike all other specialties in medicine, where sophisticated procedures and expensive tools are needed to reach the diagnosis, in hematology, a simple bone marrow examination can give ultimate diagnostic ideas in the matter of hours, if not minutes. Bone marrow examination is such a rewarding part of our diagnostic armamentarium, it should be considered in every blood disease that defies simple diagnostic concepts. Just to name a few, most of the leukemias, myelodysplastic syndromes, myelomas, megaloblastic and aplastic anemias could not be diagnosed without proper bone marrow examination. Bone marrow cellularity is an essential and integral part of the bone marrow examination report. Cellularity could be obtained from both bone marrow aspirations and biopsies. While bone marrow aspiration is an easy procedure that could be done and reported upon in less than an hour, bone marrow biopsy is a more aggressive diagnostic procedure that could take days, if not weeks, to be reported upon. Unfortunately, patients in the hematology practice cannot usually wait for extended periods of time and need diagnosis and management to be arranged for at the earliest possible time. Predicting an important marrow finding like cellularity from aspiration as opposed to biopsy would give the clinician the convenience of an early diagnosis and timely management. In this study, we aimed at knowing the degree of correlation between the bone marrow aspiration cellularity that could be ready within a short period of time to that of bone marrow biopsy cellularity that could take days, a period beyond sensibleness of any diagnostic tool to have a positive impact on the management, especially for acute blood disorders. In diseases like acute leukemias or aplastic anemia, one does not have the luxury of waiting for weeks to have the diagnosis. We collected 200 consecutive bone marrow aspirations.

Apostmortem study of sudden death among adults in Erbil Governorate

Name: Jamila salih hamadamin
Nature of the research: Academic
Degree: M.sc
Specialty: forensic medicine
Date the discussion:
Supervisor: Asst. Prof. Dr. Nadia Yassoub Ahmed

Abstract

Sudden unexpected death of an individual is an alarming and dramatic event, especially when it occurs among young fit adults. In order to survey sudden death in our locality, we collected all cases aged ≥ 18 years, in whom death occurred within 24 hours from the onset of symptoms and who were referred to the Forensic Institute at Rizgary Teaching Hospital in Erbil governorate for two periods:- 1st period: - from 1st Sept. 2007 to 1st Sept. 2008 (group I). 2nd period: - from 1st Sept 2002 to 1st Sept 2007(group II) for comparative purposes. Age, sex, place of death, associated risk factors; pathologic findings at autopsy and cause of death were reported. We found:-

1- Prevalence of sudden death in group I (7%), which is higher than its prevalence in group II (5.9%), but statistically it was not significant (P> 0.05).

2- Prevalence of sudden death increased in young in group I in which the mean age of sudden death cases and the commonest affected age group were 42 years and (20-29) years respectively, and they were lower in comparison with group II, where the mean age and the commonest age group were 45.6 years and (50-59) years respectively.

3- Sudden death occurred more commonly among males with a higher male: female ratio in both groups, but no statistical significant correlation was found between sudden death and sex (P= 0.451).

4- Most cases of sudden death occurred outside the hospitals in both groups.

5- In group I, smoking and alcohol drinking were possible risk factors for sudden death especially among males with a statistically significant correlation between gender and smoking(P<0.001) but the correlation between alcohol drinking and gender was statistically not significant(P=0.434).

6- In group I, a complete forensic autopsy was performed in (50%) of cases which was higher in comparison with group II (29%) with a statistically significant difference (P<0.001).

7- Sudden deaths due to cardiovascular diseases accounted for the largest proportion in both groups (34.3%) and (43.8%) respectively.

8- The most common cardiac cause of sudden death was ischemic heart disease in both groups which accounted for (21.8%) and (42%) of the total cases respectively.

9- The proportion of sudden death due to unknown etiology is decreased in group I (15.6%) in comparison with group II (24.5%), but statistically it was not significant (P> 0.05).

Clinical and pathological characteristics of renal biopsies done in Erbil teaching hospital

Name: Hawar K.Darwish Amin
Nature of the research: Clinical
Degree: High Diploma
Specialty: Nephrology
Date the discussion: 27/3/2009
Supervisor: Dr. Safa E.Almukhtar

Abstract

In this cross sectional descriptive study one hundred and seven biopsies were collected from Janurary 2007 to September 2008 .The biopsies were done in Erbil Teaching Hospital with a variety of indications and aiming to ascertain the frequency of various histologic lesions of primary glomerular diseases in different age groups and clarify the importance of kidney biopsy in various kidney diseases regading treatment and prognosis. Focal segmental glomerulosclerosis was the most common diagnosis in patients with nephrotic syndrome (30%) followed by minimal change nephropathy (17%), followed by membranous nephropathy(12%) ,and membranoproliferative(7%) . Renal amyloidosis was found in (7%) and the most common cause was   juvenile chronic arthritis, other causes were severe rheumatoid arthritis and pulmonary tuberculosis that were not complaint with their treatment with multiple relapse and remissions leading to clinical nephrotic syndrome with renal involvement.SLE (13%) patients were classified pathologically into various groups according to their biopsy findings: The renal biopsy showed diffuse proliferative GN classified as class IV lupus nephritis in eight patients (57%), one of them showed advanced glomerulosclerosis ,and other patient showed in addition acute interstitial nephritis. Three patients (21%) showed focal proliferative lesions classified as class III lupus nephritis with minimal interstitial damage. Two (14%) patients showed class II lupus nephritis lesions with mesangial expansion and proliferation without glomerular damage. One (7%) patient showed changes classical of membranous lupus nephritis (class V). Hyperlipidemia was very common in patients with nephrotic syndrome. The causes of acute renal failure according to their biopsy findings were: The kidney biopsy showed intra tubular hemoglobin casts in the patient with PNH, with necrotic tubular cells diagnostic of acute tubular necrosis. Another biopsy finding showed intra glomerular thrombosis with thrombi that was highly suggestive of HUS. Five biopsies showed signs of acute interstitial nephritis with inflammatory cell infiltration in the interstitium. Tubular cell necrosis classical of ATN was seen in another four patients. Two patients showed crescentic glomerulonephritis on kidney biopsy compatible with their clinical background of Wegener's granulomatosis.

Types of anaemia and body iron status in patients with thyroid diseases in Erbil province

Name: Avang Younis Haddad
Nature of the research: Academic
Degree: M.Sc
Specialty: Haematology
Date the discussion: 31/12/2008
Supervisor: Assist. Prof. Dr. Mohamad Salih Jaff

Abstract

This study included 308 patients (240females & 68males) and 100 controls (75females & 25males), 154 were with hypothyroidism, 153 with hyperthyroidism and only one case presented with carcinoma of thyroid gland. Their ages ranged between 17-90 years (mean=42.8years), Samples were taken in Rizgary and Erbil teaching hospitals between a period of November 2007 and April 2008. CBC, serum ferritin, serum iron, TIBC, T3, T4 and TSH were done for them. The study showed that 62 (20.12%) cases had anaemia, 42(67.74%) of them had microcytic hypochromic anaemia, 14 (22.58%) normocytic normochromic and 6 (9.67%) macrocytic anaemia. In hyperthyroid cases 34(22.22%) cases had anaemias. [23(15%) microcytic hypochromic, 10 (6.53%) normocytic normochromic& only one (0.65%) macrocytic], while in hypothyroid cases only 27(17.53%) had anaemia [19(12.3%) microcytic hypochromic, 3(1.94%) normocytic normochromic & 5(3.2%) macrocytic]. 191(62.01%) cases appeared to have normal iron status, and 117(37.98%) cases had abnormal iron status, In hyperthyroid cases; 100(65.35%) of them had normal iron parameters, 39(25.49%) of them had iron deficiency, 8(5.22%) had iron over load and 6(3.22%) of them their iron status was of anaemia of chronic diseases, while in hypothyroid cases; 91(59.09%) cases presented with normal iron parameters, 58(37.66%) had iron deficiency, and 5(3.24%) iron parameters of anaemia of chronic diseases. A statistical significant relation was found between type of diseases and type of anaemia. The result of this study has showed that the rate of anaemia in thyroid diseases is not uncommon, the commonest type of anaemia was iron deficiency anaemia, and high percentage of abnormal body iron status has been recorded (37.66%).

Anthropometric measurements among newborns and its relation to maternal factors in maternity hospital in Hawler city

Name: Millat Ismail Haji
Nature of the research: Academic
Degree: M.Sc.
Specialty: Embryology
Date the discussion: 12/12/2009
Supervisor: Prof. Dr. Kameel M. Naom

Abstract

The aim of this study is to assess the influence of residency, socioeconomic status, educational level, smoking habit of mother & father, type of delivery, maternal age, maternal height, maternal weight, gestational age. parity, mothers attendance to antenatal clinics, maternal Hb concentration blood group & Rh on newborn birth weight and their anthropometric measurements (APMs) by examination the newborn, direct interviewing the newborn mothers and doing some biochemical investigation.

A total of 1004 newborn infants with their healthy mothers were included in this study. Data of Anthropometric measurements of newborn mothers were collected within six hours after delivery in maternity hospital in Hawler city from oct.2007 – April 2008.

The mean and SD of birth weights and APMs of all newborn infants. In the sample were as following: Birth weight (BW) (3.335 ± 0.58kg), Head circumference (HC) (34.2 ± 1.75 cm), Crown rump length (CRL) (30, 922 ± 2.08 cm), Crown heel length (CHL) (50.223 ± 2,58 cm), Chest circumference (CC) (31.764 ± 2.43 cm), Abdominal circumference 30.749 ± 2.69 cm), and Mid arm circumference (MAC) (10.629 ± 1021cm).

The results of this study also showed strong association among the anthropometric variables. There were beneficial effect of sex, number of parity. Gestational age, maternal weight, height &age, residency, and socioeconomic status on the growth of the infants and its measurements.

There were no significant relationship between mean of newborn a eights and educational state, maternal attendance to antenatal clinic& receiving fenofolic. maternal & paternal smoking habit, and route of delivery.

Concerning the biological investigations, only lib concentration a positive influence on the newborn birth weights and other finding of this study provides some important information about and infants health and calls for better and proper care during care.

Role of KI-67 ImmunohistoChemistry in Grading of Invasive breast carcinoma

Name: Fairuz Abdullah Kakasur
Nature of the research: Academic
Degree: M.Sc
Specialty:
Date of the discussion: 18/12/2008
Supervisor: Senior Lecturer Dr. Shireen Rassul Dabbagh

Abstract

Breast cancer is the leading cause of death in women worldwide, and it's the most common malignant tumor in Iraqi females accounting for one third of registered female cancers in 2001. Several prognostic markers of breast cancer have been identified including Ki-67 expression which is also important in the prediction of response to chemoendocrine therapy. Hundredformalin fixed, paraffin embedded tissue samples of confirmed invasive breast carcinoma during the period of January 2005 to July 2008 were collected and reviewed. 4µm sections were cut, stained with (hematoxylin and eosin) and immuohistochemical staining for Ki-67 antigen using [Envision®+Dual link system-HRP (DAB+)] & monoclonal mouse antihuman antibody Ki-67 antigen: clone MIB-1(code N1633, Dako cytomation, Glostrup, Denmark). The imunohistochemical stained slides were interpreted and scored by light microscope and the results were correlated with clinicopathological parameters. The results showed that Ki67 expression was positive in 97% of the cases; pure mucinous carcinoma showed negative staining. Significant correlation was found between Ki-67 expression & age of the patients, menopausal status, histological types, histological grades, mitotic count, nuclear grade, tumor size, pathological stage. While no correlation was found with gender, lymph node status & lymphovascular invasions. In conclusion: The expression of Ki-67 immunohistochemistry was higher in younger age groups, high grade invasive ductal carcinoma, invasive lobular carcinoma and medullary carcinoma. Ki-67 IHC showed a significant correlation with histological grade, mitotic count, nuclear grade, tumor size & pathological stage.

Symptomatic and Asymptomatic Urinary Tract Infections during Pregnancy (Bacterial Agents & Predisposing Factors)

Name: Sheila Mufeed Nuraddin
Nature of the research: Academic
Degree: M.Sc
Specialty: Medical Microbiology
Date the discussion: 10/3/2009
Supervisor: lecturer Dr. Esam Y. Mansoor

Abstract

Urinary tract infection is one of the most common medical complications of pregnancy and may lead to serious fetal morbidity like prematurity and low-birth-weight infants and may result in maternal morbidity, like renal dysfunction, sepsis, respiratory insufficiency and even maternal death if it is progressed to acute pyelonephritis. From the period 20/January/2008 to 20/ June/2008 at (Nafee Akraee) health center a total of two hundred and fifty symptomatic and asymptomatic pregnant women were investigated. Urine samples were collected and examined using microscopic, dipstick and cultural techniques. Blood samples were taken and C-reactive protein test was performed on eighty five randomly selected pregnant women. Isolated bacteria were identified using morphological and biochemical tests. The susceptibility of isolated bacteria to different antibiotics was examined. The percentage of culture positive symptomatic pregnant women (62.17%) was significantly higher than asymptomatic pregnant women (10.70%). The percentage of gram negative bacteria (67.86%) causing urinary tract infection was higher than gram positive bacteria (32.14%). Escherichia coli were the most common organism causing the infection representing 40.47% of total isolates. It was found that the incidence of UTI increased with the increase in age. The percentage of UTI among pregnant women with history of previous infection (40.5%) was significantly higher than those without history of infection (21.27%).The percentage of UTI among women with history of previous abortion (38.3%) was slightly higher than the percentage of UTI among women without history of abortion (31.4%) but the differences were not significant. The percentage of urinary tract infection among multipara pregnant women (35.7%) was higher than with those primy(31%) but the differences were not significant. The percentage of pregnant women with urinary tract infection during second trimester of pregnancy (36.65%) was slightly higher than in pregnant women during third trimester of pregnancy (30.28%) and first trimester of pregnancy (30%). The percentage of infection among pregnant women increased with the decrease in hemoglobin level. The incidence of infection among non-educated pregnant women (37%) was higher than educated women (34%) but the differences were not significant. The isolated bacteria were all sensitive to ciprofloxacin and Nitrofurantion (100% sensitivity) and all were resistant to ampicillin (100% resistancy).

Prevalence of childhood obesity among a sample of basic education school children in Erbil city

Name: Sherzad Abdulahad Shabu
Nature of the research: Academic
Degree: M.Sc.
Specialty: Community medicine
Date the discussion: 12/12/2009
Supervisor: Assist. Prof. Dr. Namir Ghanim Al-Tawil

Abstract

Childhood obesity is one of the most serious public health challenges of the 21st century. The problem is global and is steadily affecting many low and middle income countries, particularly in urban setting. This study aimed at finding out the prevalence of childhood obesity in Erbil city and its association with socio-demographic characteristics and risk factors, in addition to assessing the impact of a childhood obesity awareness program on overweight and obese children. A cross sectional survey was carried out between 10 January to 15 October 2009, and a multi-stage cluster sampling method was used to select 1200 children, 640 girls and 560 boys, with 12-19 years age range from 30 different basic education schools inside Erbil city. A structured questionnaire was used to collect the relevant data. Measures of height, weight, waist circumference and hip circumference were also recorded. A health education program was implemented for overweight children and a control group among normal weight children was used for comparison purposes to assess its impact. The prevalence of overweight obesity among the study sample was 9.3% and 1.6%, respectively. Multiple regression analysis revealed that overweight was only significantly associated with high socio-economic level; however, a significant association was also found with younger age, decreased number of daily eaten main meals, the irregularity of having breakfast, eating at restaurants and decreased hours of practicing exercise. No significant statistical association was found with the sex of the child, the level of parental education, eating between meals, eating rice and fast foods, consuming soft drinks and hours spent in watching TV or playing computer or video games. Following the implementation of health education program, the rate of weight reduction among overweight children, especially girls, was higher than among controls, although it was of no statistically significant level. In conclusion, the problem of childhood overweight and obesity affecting the children in our society is not so profound in comparison with other countries like western and Gulf countries. Multi-level integrated actions need to be taken by the Erbil Directorate of Education, schools, media, civil society organizations, parents and the community emphasizing the importance of controlling the risk factors.

Effects of Olanzapine and Haloperidol on Serum Malondialdehyde, Prolactin Level, Blood Glucose and Lipid Profile in Schizophrenic Patients

Name: Muhammad Abdulwahhab Hassan
Nature of the research: Academic
Degree: M.Sc
Specialty: Pharmacology
Date the discussion: 10/3/2009
Supervisor: Assist. Prof. Dr. Kawa F. Dizaye

Abstract

Between November, 2007 and June 2008, fifty schizophrenic patients participated in a cross-sectional study; Schizophrenic patients were selected randomly from two groups, one group was taking haloperidol as typical antipsychotic drugs, and another group was taking olanzapine as atypical antipsychotic drugs, both groups were taking prescribed typical or atypical antipsychotic medication for a minimum of one month. Fasting blood samples for the assessment of serum malondialdehyde, lipid profile, glucose and prolactin levels were obtained after one month of the drug prescribing time. From those fifty patients, 16 patients were selected to follow them prospectively. The results of the prevalence study of fifty patients (30 patients on olanzapine treatment and 20 patients on haloperidol treatment) indicated that there was a higher body mass index ($P<0.05$) , dyslipidemia and a lower malondialdehyde , prolactin levels ($P<0.05$) in olanzapine-treated patients in comparison with haloperidol-treated patients and there were two cases of diabetes mellitus in olanzapine group while there were no cases of diabetes in haloperidol group. The glucose levels of remaining patients were within normal limit in both groups. In the prospective study in which patients were followed up over a mean period of time of 75 days for haloperidol group and 105 days for olanzapine group, there was no detection to any case of diabetes mellitus while there was a decrease in dyslipidemia and glucose levels in both groups except triglyceride level which was higher in olanzapine group. The elevation of malondialdehyde level was higher in haloperidol group ($P<0.05$) than olanzapine group.

Prevalence of female Genital Mutilation among a sample of women attending health care facilities in Erbil city

Name: Berivan Adnan Yasin
Nature of the research: Academic
Degree: M.Sc
Specialty: community Medicine
Date of the discussion: 26/5/2009
Supervisor: Assistant Professor Dr. Namir Al-Tawil

Abstract

Female genital mutilation (FGM) is a traditional practice with severe health consequences, it is the main manifestation of gender inequality, it is deeply rooted tradition, and it is not religious but is practiced across religions in more than 28 countries in Africa and in some countries in Asia and Middle East. The main aims of the study were to estimate the prevalence of FGM in Erbil city, to detect the types and patterns of this procedure and to estimate the knowledge and attitudes of women toward the practice among the studied sample. In order to fulfill these aims, across-sectional study was carried out in Erbil city during the period 1st of November 2007 to end of March 2009. The sample included 2000 women, 1000 women were selected from the maternity teaching hospital and another 1000 were selected from the 14 primary health care centers. Women aged 15-49 years, married and unmarried Kurdish Muslim women were interviewed using a questionnaire form designed by the investigator and physical examination of females who stated that they were mutilated was carried out including examination of external genital areas. The examination was optional and some married and unmarried women refused examination; refusal rate for examination in this study was 3.5%. Results of the study showed that the prevalence of FGM was 70.4%. Three quarters were born in urban areas. The prevalence of mutilated women whose place of birth was in rural areas was 77.4%. Only 29.5% of the total sample stated that there is bad impact on women's health, 24.2% of uncircumcised and 24% of circumcised women. The most common impact was decreased libido. Nearly two thirds (63.3%) of women were against circumcision; 46.1% of mutilated women stated that they were intending to do genital mutilation for their daughters. The most common age of circumcision was between 4-7 years constituted 46.76% of mutilated women. Only 6.3% of mutilated women reported that they had complications, the most common complication was bleeding (54.4%), decreased libido (26.7%), pain (15.5). It can be concluded that FGM is still done due to reasons related mostly to customs, and the community is not aware of magnitude of the practice because it is usually type one mutilation (mild form) which has few complications.

Deaths from Road Traffic Accidents in Duhok government

Name: Afrasiab Mosa Yones
Nature of the research: Academic
Degree: M.Sc
Specialty: Forensic Medicine
Date of the discussion: 19 / 7 /2009
Supervisor: Dr. Farhad Khwrshid Sulayvani

Abstract

Background: Road traffic accidents (RTA) are a significant, but preventable, cause of death, disability and economic loss in developing countries among persons of the economically active age group.

Objectives: to determine the prevalence and causes of death from road traffic accidents in Duhok governorate.

Materials and Methods: to study deaths from road traffic accidents in Duhok .All RTA dead cases were studied during the period of four years(2005-2008) .Data were collected from the medico-legal reports(Directorate of Duhok-Forensic Medicine) and patient case sheets if they were hospitalized before death then analyzed by Microsoft Excel.

Results: during the study period there were 676 dead cases and Case Fatality Rate was 12.3% and the Specific Death Rate was 22.2 per 100 000 population in 2009 .The predominance number of cases were male (78.5%) and Male to Female ratio were 3.7:1.Fatalities were vulnerable in order of frequency among pedestrians 45%, drivers 37% and passengers 25%. The highest number of RTA victims 52.7% (died and injured)and 42.8% of died cases were in the age group 21-50 years. 94.8% of fatal cases occurred before arriving to hospital .The great majority of cases found to have head injury (45%).Skull fracture in multiple anatomical sites was seen in 34.2% of cases and the cause of death in 82.6% of victims was the intracranial hemorrhage and brain tissue laceration.

Conclusion: Deaths from road traffic accidents ,in Duhok, is the first major preventable cause of all deaths recorded in Dohuk Forensic Medicine Directorate. It is most common in males with active economically age group and pedestrians.

Audiometric Hearing Threshold testing of Children at Primary School in Erbil

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Abstract

In order to understand the normal hearing thresholds for primary school children in Erbil city, this hearing survey was conducted on 305 normal healthy children in the Khabure primary school in a period between December 2007 to April 2008. Age of children between (6 - 11) years of both sexes . Audiometric hearing threshold testing with air conduction was carried out using (operating instruction ST 20), equipped with earphone mounted in Maico diagnostic   GmbH. The age of primary school children tested are divided into three age groups : (6- 7), (8–9) and (10 –11) years. Pure tone air conduction audiometry was done at the following frequencies: (250, 500, 1000, 200, 4000, 6000 and 8000) Hertz. A statistical analysis of the central tendency (mean) and variability (standard deviations) of the hearing thresholds was preformed at each frequency of the right and left ears separately of each group , males and females, for both ears of the three groups combined together .The results obtained from this study are :

1 - The highest hearing sensitivity occurs at 4000 Hertz frequency. The curve then ascends at lower and higher frequencies.

2- The   hearing   threshold of females is better than males at all frequencies except at (500 and 4000) Hertz.

3 - Age   group 10-11 years has better hearing threshold at all frequencies except (6000) Hertz, compared with other   groups.

4- The right ear was more sensitive than the left ear at all frequencies except at (500 &1000) Hertz.

5- Our result show regarding the degree of hearing loss in the groups, 22 cases of children have hearing loss (7.3%) , 3.4% was unilateral (one ear) hearing loss , 4.7%   bilateral (both ears) hearing loss.

6- According to the three types of hearing loss , 15 children which are related to the conductive hearing loss, 7 related to sensor- neural hearing loss and one case was mixed .