

ISSN 1110-208X

BENHA MEDICAL JOURNAL

BENHA MEDICAL JOURNAL

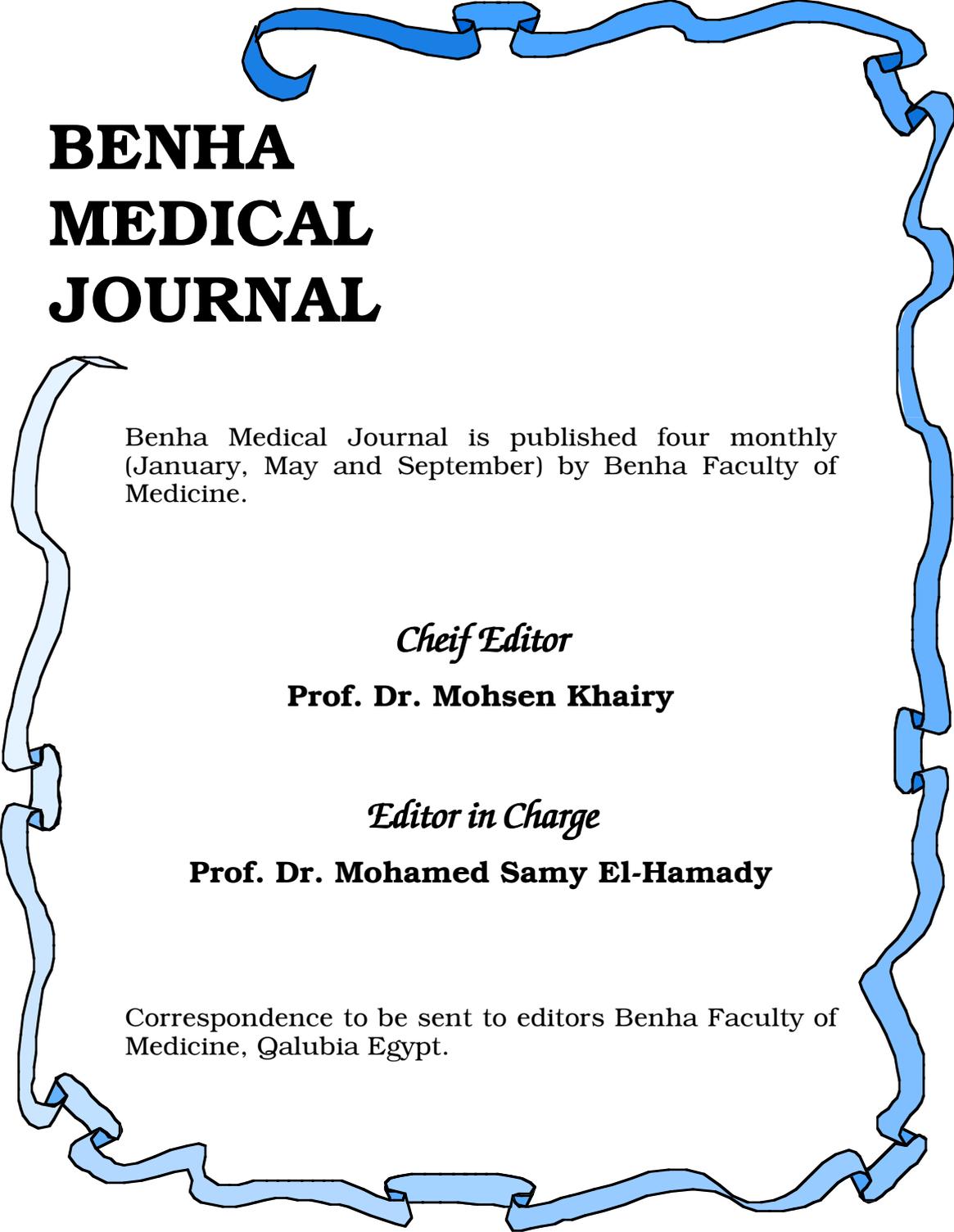
VOLUME 23

NUMBER 3

Sept. 2006

**Published by
Benha Faculty of Medicine**

**Volume 23 Number 3
Sept. 2006**



BENHA MEDICAL JOURNAL

Benha Medical Journal is published four monthly (January, May and September) by Benha Faculty of Medicine.

Chief Editor

Prof. Dr. Mohsen Khairy

Editor in Charge

Prof. Dr. Mohamed Samy El-Hamady

Correspondence to be sent to editors Benha Faculty of Medicine, Qalubia Egypt.

Editorial Board

Prof. Dr. Mohamed S. El-Hamady

Prof. Dr. Fawzy E. El-Shahid

Prof. Dr. Nabil E. Khatab

Prof. Dr. Nasr A. Belacy

Prof. Dr. Yousry A. Fekry

Prof. Dr. Mahmoud F. El-Gendy

Prof. Dr. Ahmed A. El-Gazar

Prof. Dr. Khaled A. El-Rabat

ACUTE VIRAL GASTROENTERITIS IN YOUNG CHILDREN

Mohamed O. Helmy MD and Manal Mokhtar MD*

*Departement of Pediatric, Faculty of Medicine, Cairo University and Microbiology
and Immunology Deprtement, Faculty of Medicine, Ain Shams University*, Egypt*

Abstract

Background: Paediatric diarrhoea remains one of the major causes of death in young children. The main factors for high incidence and mortality are unsafe water or inadequate sanitation, requiring social, economic and political solutions. Rota virus, Norwalk Like Virus (NLVs), and Adenovirus (40 and 41) are reportedly responsible for 4.42% of non bacterial acute sporadic gastroenteritis (GE) cases. **Materials and Methods:** A total of 200 pediatric patients symptomatizing with sporadic GE that tested using stool analysis, out of which, 80 patients proved to be negative for bacterial, parasitic and Rota virus had been examined in outpatient and inpatient pediatric department, between November 2005 and March 2006. **Results:** These 80 patients were evaluated clinically for symptoms of diarrhea, nausea, vomiting, and abdominal pains, screened for presence of NLVs in their stools using ELISA (IDEIA Kit for NLVs from Dako) and RT-PCR (Qiagen One Step RT-PCR Kit). NLVs was detected in 12 / 80 (15%) of non bacterial, non parasitic, and negative Rota virus cases using RT-PCR and in 10/80 using ELISA. Both genotypes I, and II were demonstrated in our patients using antigen detection ELISA and were confirmed by phylogenteic analysis. Infants and toddlers below 3 years of age were mostly affected (83.3%) than other pediatric age groups, the main symptoms of NLVs positive cases were non specific in the form of diarrhea in 100% of cases, vomiting of 66% of case, fever 58% of cases, and abdominal pain of 58% of cases. The disease is self limiting. No major complications were encountered apart from dehydration.

Conclusion: NLVs proved to account for considerable percent of sporadic pediatric gastroenteritis. Infants less than 3 years are more vulnerable to infection with NLVs. Direct antigen detection using ELISA is

Mohamed O. Helmy and Manal Mokhtar

a simple, rapid and less laborious than RT-PCR, but it is less sensitive than RT-PCR.

KEYWORDS : Nroviruses, Norwalk -like viruses (NLV), RT-PCR, oysters' outbreaks, molecular epidemiology, Rota virus, Astroviruses and Caliciviruses.

MEAN PLATELET VOLUME AND β-THROMBOGLOBULIN IN ACUTE ISCHEMIC STROKE PATIENTS

Abo Zaid Abd Allah MD and Anas Abd Elrahman MD*

Departments of Neuropsychiatry and Clinical Pathology ,
Benha University , Egypt*

Abstract

Objective: to establish whether acute ischemic cerebrovascular infarction is associated with raised mean platelet volume (MPV) and β-thromboglobulin (BTG) levels, and whether a relationship exists between their levels and the severity of ischemic stroke. Subjects and Methods: We have studied MPV, platelet number and β-thromboglobulin in 32 (18 men, 14 women, mean age 59 ± 15 yr) an unselected group of acute ischemic stroke patients after exclusion of patients with diseases that might affect platelet morphology or function, and compared them with data from age- and sex-healthy matched 22 (14 men, 8 women, mean age 56 ± 14 yr) control subjects. Stroke severity was assessed by the Canadian Neurological Stroke Scale (CNSS) one week after stroke onset. Results: MPV was significantly higher in ischemic stroke patients than in control subjects. Also, platelet count was significantly lower in stroke patients than in control subjects. In addition, BTG was significantly higher in ischemic stroke patients than in control subjects. We found also a significant difference between both groups as regards white cell count being higher in ischemic stroke patients and incidence of hypertension which is more in ischemic stroke patients. There was a significant difference in MPV between patients with CNSS <5 and those with CNSS ≥5, also patients with CNSS <5 had higher BTG levels than those with CNSS ≥5. There was a significant but negative correlation between MPV and platelet count in stroke patients, also between MPV and stroke severity according to CNSS, and between BTG and stroke severity. While there was a significant correlation between MPV and BTG, and also between MPV and white cell count. In addition, there was a significant correlation between BTG and

age of the patients. Regression analysis showed that there is a significant regression (dependance) of stroke severity on MPV and on BTG. In other words, stroke severity could be predicted from mean platelet volume and β -thromboglobulin. Conclusion: This study has shown an elevation of MPV, increase BTG levels and reduction of platelet count in acute ischemic stroke. Within this relationship and confounding for other significant variables in regression analysis, an increase in MPV and BTG are independently associated with stroke severity.

**EVALUATION OF LIVER FUNCTION TESTS IN
EGYPTIAN HEPATIC PATIENTS WITH
SCHISTOSOMIASIS MANSONI,
HCV AND/OR ENTERIC FEVER**

**Khaled N. El-Fayoumy MD, Doaa Sultan MD*,
Tarek Selim MD** and Eman M. Hussin MD*****

Departments of Internal Medicine, Parasitology,*

*Clinical pathology**, Faculty of Medicine Mansoura University.*

*Department of parasitology***, Faculty of Medicine Suez Canal University , Egypt*

Abstract

Two groups of patients were studied. First one included 50 schistosomiasis mansoni patients, 30 with simple infection, 10 with splenomegaly and with ascites. Second group included 111 patients of whom 20 with pure S. mansoni, 27 with pure HCV infection, 54 with mixed infection of schistosomiasis and HCV and 10 with schistosomiasis, HCV and enteric fever. Serum transaminases and anti-HCV antibodies performed, showed anti HCV raised levels in 10% of simple schistosomiasis, 60% in splenomegalic patients, 80% in ascites patients, and 7.1% in controls. Liver function tests in first group were within normal range except in those with ascites. In second group, liver function tests was normal in pure schistosomiasis patients, but in pure HCV patients serum bilirubin was normal in 30%, AST and ALT were higher. In mixed infection, serum bilirubin was normal in 20.45% and serum transaminases were higher. Patients with enteric fever, HCV and schistosomiasis showed significant increase of liver function as compared with each of pure HCV or HCV and schistosomiasis. Results were discussed.

EARLY VOCAL FOLD PRESENTATION OF AUTOIMMUNE DISEASES

**Osama Alsayad MD, Noha Maher MD*
and Ehab Abd Rahem M.Sc.****

Departments of ENT, Rheumatology and Clinical pathology ***

Benha faculty of Medicine, Benha University , Egypt

Abstract

Background : *Rheumatic diseases usually promote several systemic disorders, which can affect blood vessels, mucosa and serosa of the aerodigestive tract. Laryngeal involvement of autoimmune disease maybe in the form of vocal fold nodules and/or cricoarytenoid joint inflammation .Descriptions of vocal fold lesions related to autoimmune diseases are rare and focus mainly on rheumatoid nodules. But vocal fold pathology in autoimmune disease which is recently discovered called the bamboo node and its features are different from those of rheumatoid nodules.*

Objective (s) : *to determine the relation between focal fold nodules (Bamboo nodule) and autoimmune diseases.*

Patients and Methods: *20 patients suffering from hoarseness of voice with focal fold nodules (Bamboo nodule: white transverse submucosal lesion in the vocal fold) before surgical excision, all patients were subjected to laryngostroboscopy, clinical rheumatologic assessment, laboratory and immunological tests for autoimmune diseases.*

Results : *20 patients with vocal fold bamboo nodule were included in the study, 80% were females, 12 cases proved to be systemic lupus erythematosus (60%), 6 cases with scleroderma (30%), 2 cases with mixed connective tissue disease (10%).*

Conclusion: *patients with vocal fold nodules with high erythrocyte e sedimentation rate should be suspected to have an underlying autoimmune disease.*

Vocal fold Bamboo nodule is considered to be an early evidence of autoimmune disease so medical treatment should be taken after its surgical excision.

ABDOMINAL COMPARTMENT SYNDROME : EARLY DECOMPRESSION IS LIFE SAVING

**Farouk Hassan M.Sc. Abdel Azim M. Ali MD,
Ibrahem Dawood MD and Ashref Shouma MD**

Department of Surgery Mansoura Univeristy , Egypt

Abstract

The aim of the study: *Early recognition and treatment of patients with abdominal compartment syndrome (ACS) and its effect on morbidity and mortality.*

Patients and methods: *This prospective study was conducted on 30 patients with increased intra abdominal pressure all patients were subjected to routine investigations and measurement of the intra abdominal pressure by measuring the bladder pressure .*

Immediate decompression of critically ill patients was done and all patients were evaluated as regard the pre and post decompression variables and the patients outcome.

Results: *Post decompression significant improvement in the patients haemodynamic variable O₂ saturation and peak air way pressure was recorded ($p < 0.001$) using Chi-square test. While PH shows no significant changes ($p = 0.97$) Also significant improvement in urine output and serum creatinine level was noticed ($p < 0.001$) furthermore significant decrease of the intra abdominal Pressure was recorded ($p < 0.001$) after decompression .Morbidity and mortality relatively improved in patients with early decompression.*

In conclusion: *Early detection of cases of ACS and proper management may be life saving. Also early intervention decrease multiorgan failure and mortality. In some patients tight abdominal closure after decompression must be avoided .*

UNREAMED INTERLOCKING NAILING IN OPEN FRACTURES OF TIBIA

Abd El Bary Gouda MD

*Department of Orthopaedic, Benha Faculty of Medicine,
Benha Universty Hospital, Egypt*

Abstract

The use of small-diameter, solid ,unreamed interlocking intramedullary nails provides a good fixation option for open tibial-shaft fractures. Those provide less injury to the tibial endosteal blood supply, Maintain good bone alignment and facilitate soft-tissue management with high rate of union and low incidence of deep infection.

In the current series 23 patients with 24 open tibial shaft fractures were treated by unreamed AO solid interlocking tibial nailing (UTN). There were eight fractures (33.3%) type-I,12 fractures (50%) type-II,two fractures (8.3%) type-III-A, and two fractures (8.3) type-IIIB (according to Gustilo et al.,1984). Union was obtained in 23 fractures(96%). The average time to union was 23 weeks(range,12 to 36 weeks). One fracture (4%) type-IIIB did not unite.There were two infections (8.3%). Breakage of screws was associated with two nails (8.3%) (Neither of these were associated with a non-union nor resulted in a malunion). There was one case of malunion (4.2%). Correction was not required. There was no nail breakage nor early postoperative complications.

This study concludes that early fixation using the UTN together with aggressive radical debridement and suitable tissue coverage provides a good option for the treatment of vast majority of open tibial shaft fractures.

**SOLUBLE INTERCELLULAR ADHESION
MOLECULE-1 IN PATIENTS WITH CHRONIC
HEPATITIS C : RESPONSE TO
ANTIVIRAL THERAPY**

**Ashraf El-Fakhry MD, Mohamed Ghoneim MD,
Ossama Fouda MD, Seham Seif MD,
Mohammed M. El-Arman MD* and Eman Al-Tanaihy MD****

Departments of Internal Medicine, Clinical Pathology and Pathology** ,
Mansoura Faculty of Medicine, Mansoura, Egypt.*

Abstract

Background and aim: Soluble intercellular adhesion molecule-1 (sICAM-1) is suggested to be a non invasive marker of hepatic inflammation and fibrosis. This study aimed to estimate the concentrations of soluble ICAM-1 in patients with chronic hepatitis C and evaluate their levels during treatment with interferon/ribavirin (IFN/RIB) combination therapy.

Patients and methods: Serum concentrations of sICAM-1 were estimated by enzyme linked immunosorbent assay in 29 patients with chronic hepatitis C virus infection and in 20 seronegative healthy control subjects. Patients were treated with IFN alpha 2-b and ribavirin with serial estimations of sICAM-1 at 3, 6 and 12 months.

Results: Serum sICAM-1 levels were significantly higher in patients with chronic hepatitis C compared to control subjects (4.62 ug/L \pm 1.7 vs. 1.81 ug/L \pm 0.5; $P < 0.001$). Baseline sICAM-1 levels were similar in responders and non-responders. sICAM-1 concentrations were positively correlated with serum bilirubin ($P < 0.05$), alanine aminotransferase (ALT), $P < 0.01$, aspartate aminotransferase (AST), $P < 0.01$, gamma glutamyl transpeptidase (GGT), $P < 0.05$, HCV-RNA levels ($P < 0.001$) and negatively correlated with the prothrombin concentration ($P < 0.05$). Significant reduction of sICAM-1 levels occurred only in responders during the first 3 months of therapy. A successful response to antiviral treatment was much higher in the group showing a decrease of sICAM-1 than in patients who did not show a decrease (66.7% vs. 15%; $P < 0.001$).

Conclusion: *Serum levels of sICAM-1 are elevated in chronic hepatitis C patients. Moreover, sICAM-1 value is correlated with extent of inflammation. Early reduction of sICAM-1 is a reliable marker of the efficacy of IFN/RIB therapy in patients with chronic hepatitis C.*

**ACUTE RESPIRATORY SYNCYTIAL VIRUS
BRONCHIOLITIS INDUCED TH2/TH1
IMBALANCE TOWARDS INITIATION
OF ALLERGIC RESPONSES**

**Elham Abdel Ghafar MD, Fouad El-Debaky MD*
and Anas Abdel Rahman MD****

Departments of Pediatrics, Medical Biochemistry & Clinical Pathology***

Abstract

Objectives: *This study aimed to evaluate the impact imposed by Respiratory syncytial virus (RSV)-associated acute bronchiolitis (AB) on immune balance manifested as Th2/Th1 cytokines ratios and to determine the sensitive and specific predictors of the development allergic respiratory diseases.*

Patients & Methods: *The study comprised 90 children (59 males and 31 females); with mean age of 21 ± 6.9 months presented by acute upper respiratory tract infection (URI) with or without bronchiolitis. Acute bronchiolitis was diagnosed if the infant had the following 3 signs; namely, tachpnoea (>60 breaths/minute), subcostal recession at rest and inspiratory crackles on auscultation and its severity assessed and scored using the Modified Symptom Scoring System; patients with severity score (SS) <3 were considered normal (free of AB), SS=4-6 mild, SS=7-9 moderate and SS=10-12 severe AB. Patients' atopic status was assessed by skin prick testing. Nasopharyngeal lavage (NPL) was performed and the obtained NPL was used for determination of RSV-specific IgA antibody activity and for ELISA estimation of NPL levels of interferon- γ (INF- γ), interleukins (IL) 4, 10 and 12.*

Results: *Clinical evaluation defined 28 infants (31.1%) with acute bronchiolitis (AB group) and 62 infants (68.9%) with URI. Patients developed AB were significantly ($p < 0.05$) younger than those with URI but with no gender predilection Skin prick testing detected 17 atopic infants (18.9%); 10 infants in AB group (35.7%) and 7 in URI group (11.3%) with a significant difference in favor of AB group, ($X^2 = 7.353$, $p < 0.01$). The mean*

total severity score of patients with AB was 7.2 ± 1.9 ; range: 4-10. There were 9 patients with mild severity, 17 patients with moderate severity and 4 patients with severe severity. NPL proved a reliable and reproducible means of collecting nasal secretions during an acute URI with no significant associated complications. NPL levels of IL-4 and IL-10 showed a significant ($p < 0.05$) increase and levels of INF- γ and IL-12 were significantly decreased in AB group compared to URI group with a significant ($p < 0.05$) decrease of NPL INF- γ in atopic compared to non-atopic patients in AB group only. The IL-4/INF- γ and IL-10/IL-12 ratios in AB group were significantly higher as a total and in both atopic and non-atopic patients compared to its counterpart in patients with URI with a positive significant correlation between IL-4/INF- γ ($r = 0.437$, $p = 0.02$) and IL-10/IL-12 ($r = 0.440$, $p = 0.019$) ratios in patients with AB and their severity symptoms. The NPL fluid of all patients with AB was positive for RSV antibodies, while detected in 43 specimens obtained from infants with URI; 5 atopic (71.4%) and 38 non-atopic (69.1%) with a total detection rate of RSV antibodies of 71 of 90 specimens (71.9%). NPL levels of IL-4 and IL-10 showed a significant ($p < 0.05$) increase while the levels of INF- γ and IL-12 showed a significant ($p < 0.05$) decrease in patients had RSV antibodies positive compared to those had RSV antibodies negative with a significantly higher IL-4/INF- γ and IL-10/IL-12 ratios in patients with RSV antibodies positive and a positive significant correlation between the positivity of NPL for RSV antibodies and IL-4/INF- γ and IL-10/IL-12 ratios and NPL level of IL-10 and a negative significant correlation between the positivity of NPL for RSV antibodies and NPL levels of INF- γ and IL-12. The receiver operating characteristic (ROC) curve analysis judged by the area under the curve (AUC) defined NPL level of INF- γ as a sensitive predictor and IL-4/INF- γ ratio of their levels in NPL as a specific predictor for possibility of the development of allergic respiratory disease in patients with RSV infection of the respiratory tract with an AUC=0.267 and 0.725, respectively.

Conclusion: It could be concluded that acute RSV bronchiolitis induced significant immune imbalance towards Th2/Th1 and estimation of NPL INF- γ level could be a sensitive screening test to define patients with atopy and liability for the development allergic respiratory diseases.

**SMOKING AMONG PHYSICIANS IN OMAN :
DO AS THEY KNOW AND BELIEVE
NOT AS THEY DO !**

Amr M. Taman MD

*Public Health Department, Faculty of Medicine,
Tanta University, Egypt*

Abstract

Background and Objectives: *The knowledge, skills and attitude of physicians towards smoking can be the prime motivators in persuading their patients to stop smoking and their activity to address smoking issues are crucial in all efforts to stop smoking.*

The aim of this work *was to study physicians' knowledge, attitude and practice regarding smoking in Oman.*

Subjects and Methods: *A cross sectional study was carried out on 421 physicians randomly selected from health care facilities of MOH in Oman. Physicians answered a self administered questionnaire inquiring about personal characteristics, current cigarette smoking, ex-smoking, worksite practices and knowledge and attitude regarding their role and different policies to combat smoking as well as consequences of smoking (active and passive) on health.*

Results: *The present study revealed that 10.2% of physicians were cigarette smokers, 79.6% were non-cigarette smokers and 10.2% were ex-cigarette smokers. Smoking was found to be higher among males, singles, non Omanis, medical specialists and those working in secondary and tertiary care facilities. The mean age of starting smoking was 23.42 years, the mean duration of smoking was 19.14 years and the average cigarettes smoked per day was 7.23. The mean ages of starting and quitting smoking of ex-smokers were 20.81 and 32.60 years respectively. Psychological stress was the most frequent factor for continuation of smoking (34.88%). Regarding stage of change, 34.88 % of smokers pointed out that they are ready to quit now. Health concerns represented the most important cause of cessation of smoking among ex-smokers*

(62.79%). More than three-quarters of participants (79.84%) mentioned that smoking is not allowed at all on the premises of their work places. Counseling followed by self-help materials e.g., health education booklets were the most available and used interventions to help patients to stop smoking. Less than one-third of respondents (31.68%) felt that they were well prepared when counseling patients on how to stop cigarette smoking. Most of them (77.46%) mentioned that they did not receive any formal training in smoking cessation approaches. Higher agreement scores were reported regarding nearly all policies to combat smoking. Low scores were reported among smokers compared with other groups regarding consequences of smoking on health.

Conclusions and Recommendations: In spite of health awareness and official anti-smoking rules in Oman, 10.2% of physicians are still smoking. Non-smoking programs should be offered for smoking physicians to overcome their ambivalence, increase their motivation and maintain their ability to quit. Policies to combat smoking should be enforced.

Index Words: Smoking, ex-smoking, knowledge, attitude, physicians

**ENDOTHELIAL DYSFUNCTION IN
OBESE FEMALES WITH AND WITHOUT
POLYCYSTIC OVARY SYNDROME (PCOS) :
ROLE OF VASCULAR ENDOTHELIAL
GROWTH FACTOR (VEGF)**

**Mohamed Ghoniem MD, Azza A. El-Baiomy MD*
and Soma S. Abd El-Gawad MD***

Departments of Internal Medicine and Clinical Pathology,
Faculty of Medicine, Mansoura University, Egypt.*

Abstract

Background and Objective: Obesity is the key determinant of insulin resistance. Hyperinsulinemia plays a central role in the pathogenesis of both metabolic syndrome and polycystic ovary syndrome (PCOS). Adipose tissue expresses and releases some bioactive molecules which may have a potential role in the development of obesity associated metabolic disorders and cardiovascular diseases. Vascular endothelial growth factor (VEGF) is an important angiogenic paracrine factor secreted from adipose tissue and plays a fundamental role in pathological neovascularization that is observed in atherosclerosis. Nitric Oxide (NO) is a cell signaling molecule that plays important role in regulating and increasing arterial blood flow and any endothelial dysfunction that impairs its secretion may be a key risk factor for the development of micro- and macrovascular diseases. In this study **we aimed to:** (1) Evaluate the serum concentrations of VEGF and NO in obese females with and without PCOS. (2) Explore the relations between both of them (VEGF & NO) and different components of the metabolic syndrome in such patients.

Subjects and methods: Forty female patients were included in this study. They were categorized into 3 groups; group (1): comprised 18 obese non PCOS females; group (2): comprised 12 obese females having PCOS, group (3): comprised 10 non obese females having PCOS. In addition to 10 normal-weight healthy females as a control group. Serum VEGF, NO, fasting plasma insulin, free testosterone, blood glucose, lipid profile were measured in addition to different clinical and anthropometric parameters.

Results: serum VEGF concentrations were significantly higher in obese females without PCOS and obese female having PCOS compared to non obese PCOS Patients ($P < 0.02$, < 0.01 respectively). Serum NO concentrations were significantly lower in obese females without PCOS and obese females having PCOS compared to non obese PCOS patients ($P < 0.001$, < 0.001). Serum free testosterone concentrations were significantly higher in obese and non obese females having PCOS compared to obese females without PCOS ($P < 0.01$, < 0.05 respectively). Serum VEGF concentrations were positively correlated with BMI ($r = 0.4$, $P < 0.05$), waist circumference ($r = 0.7$, $P < 0.001$), fasting insulin ($r = 0.5$, $P = 0.01$), HOMA-IR ($r = 0.6$, $P < 0.001$) and T.cholesterol ($r = 0.45$, $P = 0.02$). Serum NO concentrations were negatively correlated with BMI ($r = -0.7$, $P < 0.001$), waist circumference ($r = -0.4$, $P < 0.05$), VEGF ($r = -0.38$, $P = 0.05$), T-cholesterol ($r = -0.5$, $P < 0.01$) and LDL-C ($r = -0.4$, $P < 0.05$) and positively correlated with HDL-C ($r = 0.6$, $P = 0.001$). Serum free testosterone concentrations were positively correlated with waist circumference ($r = 0.42$, $P < 0.05$) and HOMA-IR ($r = 0.48$, $P < 0.05$). Mean blood pressure, fasting glucose, fasting insulin, T. cholesterol, triglycerides, and LDL-C were significantly higher, while HDL-C was significantly lower in obese females with PCOS compared to non obese females with PCOS ($P < 0.01$, < 0.001 , < 0.01 , < 0.01 , < 0.001 , < 0.01 , < 0.05 respectively).

Conclusion: In the present study, it can be concluded that: (1) Obesity is associated with increased level of serum VEGF and decrease level of serum NO, and there is strong correlation between their concentrations and some components of the metabolic syndrome. (2) In female patients with PCOS, the metabolic abnormalities (Hyperinsulinaemia, impaired glucose tolerance and dyslipidemia) that act as a cardiovascular risk are mainly due to the accompanying obesity, and increase serum level of testosterone in such patients is an additional risk. (3) Increased level of VEGF in obesity could induce endothelial dysfunction, impairing NO secretion and may have a potential role in progression of atherosclerosis and cardiovascular complications associated with obesity.

Key words: Obesity, PCOS, VEGF, NO, Metabolic syndrome.

Abbreviation: Vascular endothelial growth factor (VEGF), Nitric Oxide (NO), Polycystic ovary syndrome (PCOS), Cardiovascular disease (CVD), Diabetes mellitus (DM), Homeostasis model assessment of insulin resistance (HOMA-IR).

**MODIFIED PARTIAL CLOSURE OF THE
VAGINAL SPECULUM DURING EMBRYO
TRANSFER TECHNIQUE COULD MINIMIZE
EMBRYO EXPULSION AFTER
EMBRYO TRANSFER**

Nour Ashmawy MD

*Department Of Obstetrics and Gynecology,
Benha Faculty Of Medicine, Benha University, Egypt*

Abstract

Objective: *To evaluate partial closure of the vaginal speculum during mock embryo transfer (ET) and its effect on minimizing expulsion of the media from the uterine cavity.*

Study design: *This study was carried out on 2 groups of female patients (the study and control groups), each composed of 20 patients. They are complaining of 1ry and 2ry infertility which need treatment with in vitro fertilization / intracytoplasmic sperm injection (IVF / ICSI). During routine mock ET, partial closure of the vaginal speculum was done in the study group before introduction of ET catheter, while in the control group the speculum was kept opened. Ham's F10, the same amount used in real ET was ejected. Both groups were compared as regards: 1) The duration of time of discomfort, suprapubic heaviness or cramping felt by the patient after speculum application and insertion of the catheter, 2) The uterocervical (UC) angle with open speculum in both groups and after partial closure of the speculum in the study group, 3) The distance between hyperechogenic medium associated air bubble and uterine fundal endometrium immediately after ejection of the media and after 30 min.*

Results: *The duration of the time of discomfort, suprapubic heaviness or cramping was significantly less in the study group. The mean time was (26 ± 0.8 sec.) in the study group and was (61 ± 0.9) sec. in the control group. The UC angle decreased by ($25.7^{\circ} \pm 3.9^{\circ}$) with partial closure of the speculum. The mean UC angle was ($46.8^{\circ} \pm 4.2^{\circ}$) with opened speculum and ($21.1^{\circ} \pm 3.2^{\circ}$) with partial closure which was significantly*

less. There was non significant difference between the two groups in the position of the media inside the uterus immediately after ejection. The mean distances were $(10.92 \pm 1.1 \text{ mm})$ and $(11.1 \pm 0.9 \text{ mm})$ in the study and control groups respectively. After 30 min., movement ($\geq 5 \text{ mm}$) towards the cervix was seen in 2 patients in the study group and 9 patients in the control group. The mean descent was $(8.1 \pm 1.1 \text{ mm})$ in the study group and was $(18.3 \pm 3.6 \text{ mm})$ in the control group. The number of patients with descent and the distance of descent were significantly less in the study group.

Conclusion: Partial closure of the vaginal speculum is a simple modification of ET technique; make it less discomfort and less traumatic due to more straightening of the uterus. These decrease the uterine contractions and subsequently minimize partial or total expulsion of the media from the uterine cavity. If practiced during real ET, it could minimize the embryos expulsion and improve the implantation and pregnancy rates in IVF/ICSI.

Keywords: ET technique, partial closure of the vaginal speculum, embryo expulsion.

**REVERSED RADIAL FOREARM FLAP WITH
CEPHALIC VEIN PRESERVATION FOR HAND
SOFT TISSUE RECONSTRUCTION**

**Ahmed Al-Barah MD, Ayman Omar MD, Tarek Kishk MD,
Mohamed Megahed MD, Mohamed Ashraf Hafez MD*
and Mahmoud Hadhoud MD****

Department of General Surgery Menoufyia and Benha Faculties of Medicine,
Department of orthopedic** Surgery , Menoufyia Faculty of Medicine, Egypt*

Abstract

This study was designed to evaluate the applicability of the reversed radial forearm flap with cephalic vein preservation for hand soft tissue reconstruction. This study included 17 patients with skin hand defects due to different causes. Patients with poor filling of the hand from the ulnar artery during Allen's test were excluded from the study. The flap was designed on the course of the radial artery, at the anterior surface of the forearm, as proximal as possible and the arc of rotation was designed to be at the anatomical snuff box to allow smooth arc of rotation. Venous drainage of the flap was depended only on the venae comitantes without any dissection to the cephalic vein. Apart from one flap which had partial skin loss (about 10% of its size), all the flaps survived completely with adequate skin coverage of the defects. All the patients regained satisfactory functional results of the hand and accepted the cosmetic appearance of the donor and recipient areas. In conclusion. The radial artery venae comitantes are enough to drain this flap with no need to dissect the cephalic vein. This prevents unnecessary damage to cutaneous veins, nerves and lymphatics.

MICROALBUMINURIA AS A PREDICTOR FOR RESPONSE TO INTRACORPOREAL INJECTION (ICI) OF PROSTAGLANDIN-E1 (PGE1) IN TYPE 2 DIABETIC MEN WITH ERECTILE DYSFUNCTION

**Osama M. Fouda MD, Mohamed Ghoniem MD,
Ashraf Al-Fakhry MD, Ehab Al-Touraby MD,
Yousri Mostafa MD* and Azza A. Al-Biomy MD****

Internal Medicine, Andrology and Clinical Pathology** Departments
Faculty of Medicine, Mansoura University, Egypt.*

Abstract

Background and Objective : *Erectile dysfunction (ED) occur in about 25-75% of diabetic men, depending on age, duration of diabetes, glycemic control, prescence of microvascular and macrovascular complications. Microalbuminuria is present in about 7% of patients with type 2 DM at the time of diagnosis, and its prevalance 10 years after diagnosis reaches 25%. Both microalbuminuria and ED share a common determinants. soil, and background. In this study we aimed to identify whether microalbuminuria can be used as a potential predictor for the response to intracorporeal injection (ICI) of prostaglandin-E₁ (PGE₁) in diabetic men with erectile dysfunction.*

Subjects and Methods: *Forty type 2 diabetic men with ED were included in our study. Patients were screened for ED using the validated International Index of Erectile Function (IIEF) questionnaire. They were divided into two groups: Group (1) comprised 19 patients with normal urinary albumin excretion (UAE) values. Group (2) comprised 21 patients with microalbuminuria. Both groups were comparable for age, BMI and diabetic duration. Follow up for 3 months to confirm the diagnosis of microalbuminuria and better glycemic control were done. Blood glucose (fasting and postprandial), glycosylated hemoglobin (HbA1c), T-cholesterol, triglycerids, HDL-C, LDL-C, UAE in 24 hour urine collection, serum testosterone and prolactin were measured. Intracorporeal injection of 20 µg PGE₁ were done to all patients.*

Results: No significant difference in age, BMI, diabetic duration, glycemic control (FBG, PPG, HbA_{1c}), T-cholesterol, triglycerides and HDL-C between patients group with normalalbuminuria and those with microalbuminuria. Percentage of patients with ischemic heart disease (IHD), increased LDL-C, and increased UAE values were significantly higher in patients groups with microalbuminuria compared to normoalbuminuric group ($p < 0.02$, < 0.04 , < 0.001 respectively). Percentage of patients with good ICI response to PGE₁ was significantly higher in normoalbuminuric patients compared to those with microalbuminuria. ($p < 0.001$). No significant difference in age, BMI, diabetic duration, glycemic control, triglycerides and HDL-C, between patients group with good response to ICI of PGE₁ and those with poor response. Percentage of patients with IHD, microalbuminuria, T-cholesterol and LDL-C were significantly higher in patients groups with poor response compared to those with good response ($p < 0.01$, < 0.001 , < 0.05 , < 0.01 respectively). Poor response to ICI of PGE₁ was significantly positively correlated with percentage of patients with IHD, UAE values and LDL-C ($r = 0.38$ $p < 0.04$, $r = 0.62$ $p < 0.01$, $r = 0.42$ $p < 0.03$ respectively).

Conclusion: Microalbuminuria appears to be strongly and independently associated with poor response to ICI of PGE₁. The present study can suggest that microalbuminuria may be used as a potential predictor for response to ICI of PGE₁ in diabetic men with erectile dysfunction.

Key words: Diabetes Mellitus, Erectile dysfunction, Microalbuminuria, Intracorporeal injection.

Abbreviations: Diabetes Mellitus (DM), Erectile dysfunction (ED), Urinary albumin excretion (UAE), Intracorporeal injection (ICI), Prostaglandin-E₁ (PGE₁), Hypertension (HTN), Ischemic Heart Disease (IHD).

SERUM ADIPOKINES IN OBESE WITH NORMAL VERSUS THOSE WITH HIGH BODY MASS INDEX

Alaa Eldin Elgamal MD and Abdel Rahman Mokhtar MD

*Department Of Internal Medicine,
Faculty Of Medicine, Mansoura University, Egypt*

Abstract

To study the relation of body fat distribution and insulin resistance to serum adipokines in obese with normal versus high body mass index, 55 obese persons were selected and subdivided into group 1 which included 35 overweight / obese persons and group 2 which included 20 obese with essentially normal body mass index and high % body fat. All anthropometric parameters (body weight, height, BMI, waist & hip circumferences and waist/hip ratio) and bioimpedence analysis (total fat mass, fat free mass and percent body fat) were measured. Serum samples were taken for measuring fasting blood sugar, fasting serum insulin, lipid profile, serum ferritin , serum leptin and adiponectin.

Results showed a higher level of body mass index, % body fat, fat mass and hip circumference in group 1 versus group 2, while a higher level of waist / hip ratio in group 2 versus group 1. No significant differences in insulin resistance index (Homa IR), total cholesterol, high density, low density lipoprotein and s.ferritin. Serum leptin and adiponectin adjusted to % body fat showed a higher leptin level in group 1 and a lower adiponectin level in group 2. Leptin correlated positively with hip circumference, waist/hip ratio, body mass index, % body fat and Homa IR in both groups and not correlated with waist circumference or serum ferritin. Adiponectin correlated negatively with waist circumference, waist/hip ratio, Homa IR and serum ferritin in both groups and no correlation with hip circumference, body mass index or % body fat.

From this study we can conclude that, in persons with normal body mass index, percent body fat and waist over hip ratio are more reliable indices for obesity and this group had a similar abnormal metabolic profile pattern as those with elevated body mass index. Serum leptin is

Alaa Eldin Elgamal and Abdel Rahman Mokhtar

determined by subcutaneous adipose tissue and serum adiponectin level is determined by visceral fat and is considered as a marker for metabolic syndrome.

KEY WORDS: Adipokines, Leptine, Adiponectin, Insulin resistance, Fat distribution.

**PAIN PREVENTION DURING
INJECTION OF PROPOFOL.
A COMPARISON BETWEEN LIGNOCAINE
PRETREATMENT, METOCLOPRAMIDE
PRETREATMENT AND LIGNOCAINE
MIXED WITH PROPOFOL**

**Reda K. Kamel MD, Hatem El-Moutaz MD,
Mahmoud A. Awad MD, Amr A. Keera MD**

*Department of Anesthesia, Faculty of Medicine,
Benha and Beni Sweif Universities, Egypt*

Abstract

In this prospective, randomized, double-blind study, we studied the incidence and severity of painful injection of propofol. One hundred ASA I, II patients scheduled for elective surgery under general anesthesia were recruited into this study. The patients were randomized into four groups each 25 patients. Group A (placebo) receives 2ml saline before propofol, group B receives 2mL lignocaine 2% before propofol, group C receives propofol mixed with 2mL lignocaine 2% and group D receives 10mg metoclopramide before propofol. The incidence of pain was less in patients pretreated with lignocaine (group B) 32% ($p < 0.01$), patients of lignocaine mixed with propofol (group C) 28% ($p < 0.01$) and patients given metoclopramide before propofol (group D) 28% ($p < 0.01$) than in patients receiving placebo (group A) 88%. The mean pain score was less in patients in group B (0.6) or group C and D (0.4) than group A (1.7). A large difference 60%-84% of pain score was found between group B compared with group C and D with less pain in group C, D than group B. there was no statistical significant difference as regards the percent of patients in pain and quality of pain between group C and D. We conclude that pretreatment with lignocaine 40mg before propofol improves painful injection but less than pretreatment with 10mg metoclopramide or lignocaine 40mg mixed with propofol.

**ROLE OF INTERLEUKIN-8 (IL-8)
AND TUMOUR NECROSIS FACTOR- α
(TNF- α) IN THE PATHOGENESIS OF ACUTE
RHEUMATIC FEVER AND RHEUMATIC
HEART DISEASE**

**Mohamed G. Awadallah MD, Niveen M. A. Gad MD
and Soha Abd El-Hady MD***

*Departments of Microbiology and Immunology and *Pediatric,
Faculty of Medicine, Benha University, Egypt.*

Abstract

Background and aim of the work : *The mechanism of the principle of the progression of chronic rheumatic valve disease (RVD) and subsequent calcification are yet not understood . The aim of this work was to study whether inflammatory mediators (IL-8 and TNF- α) impact the severity of chronic RVD and valve calcification .*

Patients and methods : *Forty Two children were included in this study with age ranging from 6-15 years. They were divided into four groups. Group (I) included 12 patients with acute rheumatic arthritis, group (II) included 13 patients with chorea, group (III) included 8 patients with clinical carditis and group (IV) included 9 patients with chronic heart disease. Twenty healthy children were included as control group. All cases were subjected to : clinical examination, laboratory investigations included ; erythrocyte sedimentation rate, C-reactive protein and anti-streptolysin-O titre and Doppler - Echocardiographic study, IL-8 and TNF- α levels were estimated by Elisa technique.*

Results : *Serum level of IL-8 was significantly higher in patients than control group ($P < 0.001$) and in carditis than arthritis ($P < 0.05$). TNF- α was significantly higher in acute rheumatic fever than control group ($P < 0.001$). Both parameters were significantly higher in patients with chorea than arthritis and chronic heart disease . Patients with high levels of interleukin in acute phase are more liable to recurrence of rheumatic activity and the development of chronic heart disease.*

Mohamed G. Awadallah, et al...

Conclusion : *Interleukins may have a role in the pathogenesis of acute rheumatic fever and development of chronic heart disease.*

**TREATMENT OF DEVELOPMENTAL
DYSPLASIA OF THE HIP AFTER
PREVIOUS SURGICAL TREATMENT,
PROSPECTIVE STUDY OF 20 CASES**

Hani Bassiooni MD

*Department of orthopedic Surgery & Traumatology
Benha University, Egypt*

Abstract

DDH in a child who fail to achieve central reduction after previous surgical treatment is difficult to treat because of lot of factors as adhesions & fibrosis of the extra-articular soft tissues, distortion of femoral anteversion, bone stock deficiency especially after acetabular osteotomy or due to infection which by itself could be a cause. Many surgical procedures have been described for treatment of DDH including open reduction and capsulorrhaphy alone or in combination with acetabular redirectional procedures, femoral derotational & varus osteotomy or a combined acetabular and femoral procedure.

Methods: *A multicenter prospective study of 20 cases of unstable hips after previous operative treatment was done between 2000 & 2005, the age of the cases ranged from one & half to eight years old, with the main complaint is recurrent instability & limping after previous surgical treatment, the aim of the study was to determine the cause of failure to maintain stability of the hip after previous surgery & to set a protocol to treat those particular type of patients, the post operative follow up of these cases ranged from 12 to 48 months with average of 28 months.*

Results: *The overall clinical evaluation was in 15 cases (75%) excellent to good which was considered to be satisfactory & in 5 cases (25%) fair to poor which was considered to be unsatisfactory. Avascular necrosis developed in 2 hips & stiffness in one hip.*

Conclusion: *Proper preoperative as well as intraoperative assessment of the stability of the hip to determine the appropriate proce-*

Hani Bassiooni

dure required with meticulous surgical technique to achieve concentric reduction followed by proper stabilising osteotomy are essential to achieve satisfactory results .

ROLE OF INTERLEUKIN 6 IN PROGNOSIS OF ORAL SQUAMOUS CELL CARCINOMA

**Osama Alsayad MD, Kasem M. Kasem MD
and Ehab Abd Rahem MD***

Departments of ENT, Clinical pathology
Benha faculty of Medicine, Benha University, Egypt*

Abstract

Background: *Since morbidity and mortality rates due to oral cavity and oropharyngeal squamous cell carcinoma (OSCC) have improved little in the past 30 years, early detection or prevention of this disease is likely to be most effective. Interleukin (IL) 6 is one of these cytokines may contribute to the pathogenesis of this disease, and have been linked with increased tumor growth and metastasis.*

Objectives: *To investigate the role of interleukin 6 in prognosis of oral squamous cell carcinoma.*

Patients and Methods: *The study included 20 patients with oral squamous cell carcinoma (OSCC) T1 and T2, they were subjected to surgery, serum interleukin 6 were estimated before one week before surgery and 6 month after surgery by using Enzyme-linked immunosorbent assay (ELISA) technique, 10 normal subjects were used as control group.*

Results: *There were significant difference of interleukin 6 serum level one week before and after 6 month of surgery ($p < 0.05$) and significant difference between one week before surgery and control group while insignificant difference between control group and 6 month after surgery.*

Conclusion: *Our findings showed that serum interleukin 6 present in high levels in oral squamous cell carcinoma and decreased after eradication of the disease so it hold promises as biomarker for oral squamous cell carcinoma and it is effective adjunctive tool in the follow-up patients with OSCC.*

CAUDAL BUPIVACAINE AND NEOSTIGMINE COMBINATION IS AN APPROPRIATE ANALGESIC MODALITY FOR BOYS UNDERGOING HYPOSPADIUS REPAIR

**Mohamed Salem MD, Alaa El-Shereye MD,
Khaled El-Sawy MD* and Mohamed Kamal MD****

Department of Anesthesia & Intensive Care, Faculty of Medicine, Benha University.

**Department of Anesthesia, National Heart Institute, Cairo.*

***Department of Anesthesia, Assiut University, Egypt*

Abstract

Objectives: *This study aimed to evaluate the additive effects of using caudal neostigmine, midazolam or tramadol in conjunction with bupivacaine to the resultant postoperative (PO) analgesia in children undergoing hypospadias repair.*

Patients & Methods: *The study included 80 male children aged 5-8.5 years allocated randomly to four equal groups; Group B: received 0.25% plain bupivacaine (1 ml/kg), Group M received midazolam (50 µg/kg), Group T received tramadol (1.5 µg/kg) and Group N received neostigmine (2 µg/kg) in combination with 0.25% plain bupivacaine (1 ml/kg). Pain was assessed with a 5-point verbal pain score hourly for 24 hours and evaluated collectively for every 3 hours. The duration of absolute analgesia was defined as the time from caudal injection until the pain score was >2 and rescue analgesic was given at pain score ≥4. Sedation scores were measured at PO 30 and 120 minutes. Motor block was assessed on awakening by using a modified Bromage scale.*

Results: *The quality of PO pain relief, as judged by the duration of complete PO analgesia, was excellent in all studied groups. The mean duration of PO pain scored ≤2 and the time till the first request of rescue analgesia was significantly longer and the consumption of rescue analgesia was significantly less in groups M, T and N compared to group B and in group N compared to groups M and T with a significant difference in favor of group T. Up to 6-hrs postoperatively, pain scores were significantly*

lower in group N compared to the other groups and in group M and T compared to group B with significantly lower scores in group T; within the period 6-9 hrs after surgery, estimated pain scores were significantly lower in groups T and N compared to both group B and M with a significantly lower scores in group N compared to group T and thereafter, the inter-group differences were non-significant. All patients regained their motor power by 150 minutes after the end of surgery, with a non-significant difference between the studied groups as regards Bromage score despite being higher in midazolam group. There was a non-significant difference between sedation scores recorded in the studied groups and no patient had score of >2 at 30 minutes after surgery. Vomiting occurred in the recovery room in 5 patients.

Conclusion: It could be concluded that caudal analgesia using bupivacaine with any of the used adjuvant provided satisfactory postoperative analgesia with a significant prolongation of time to require rescue analgesia and significant reduction of its use. These findings were more pronounced with neostigmine that could be considered as the most appropriate adjuvant.

**ANTI-EMETIC PROPHYLAXIS DURING
LAPAROSCOPIC CHOLECYSTECTOMY :
A COMPARATIVE STUDY OF DEXAMETHASONE
VERSUS GRANISETRON**

Alaa El-Shereye MD

*Departments of Anesthesia, Faculty of Medicine,
Benha University, Egypt*

Abstract

Objectives: *The objective of this study was to compare the efficacy of antiemetic effect of dexamethasone and granisetron used alone and in combination for prevention of postoperative nausea and vomiting (PONV) following laparoscopic cholecystectomy (LC).*

Patients & Methods: *The study comprised 80 patients scheduled for LC and randomly allocated into 4 equal groups, (n= 20, each); group D: received IV dexamethasone (8 mg), group G: received IV granisetron (3 mg), group D+G: received IV dexamethasone (8 mg) and granisetron (3 mg), and group C which received IV normal saline over 60 seconds immediately before induction of general anesthesia. The severity of all episodes of PONV was recorded throughout the first 24 hours after surgery. Nausea was scored as 0=nil, 1=mild, 2=moderate, and 3=severe nausea and vomiting was scored as 0=nil, 1=one mouthful vomitus, and 2=more than one mouthful of vomitus. Complete response (i.e., emesis-free) was defined as no PONV and no need for another rescue medication. Patient's requests for rescue anti-emetics and adverse events were recorded.*

Results: *Throughout the observation period, complete response was reported in 47 patients (58.8%); 2, 15, 12 and 18 patients in groups C, D, G and D+G, respectively, whereas 33 patients (41.2%) requested rescue antiemetic either for nausea only (14 patients), vomiting only (3 patients) or nausea and vomiting (16 patients). The frequency of complete response was significantly higher in group D+G compared to groups C ($P1<0.001$), D ($P2<0.05$) and G ($P3<0.001$). Furthermore, both dexamethasone and granisetron used alone or in combination significantly reduced nausea*

and vomiting scores compared to group C with a non-significant difference between groups D and G. Combination of both drugs in group D+G significantly reduced the score of both nausea and vomiting compared to group C with non-significant difference between groups D, G and D+G, but in favor of group D+G. Seven patients (8.8%) developed side effects; 4 in group G, 2 in group D+G and only one in group D. Three patients had headache, 2 had drowsiness and 2 in group G had itching.

Conclusion: *It could be concluded that prophylaxis therapy with dexamethasone (8 mg) provided superior antiemetic effect compared versus granisetron (3 mg), however combination of both was more effective than either granisetron or dexamethasone alone for prophylactic control of PONV in patients undergoing laparoscopic cholecystectomy.*

FACTORS RELATED TO EARLY MORTALITY FROM GASTROESOPHAGEAL VARICEAL BLEEDING

Seham M. Seif MD and Nahed A. Al-Toukhy MD*

*Departments of Internal Medicine and Radiology**

Faculty of Medicine, Mansoura University, Egypt

Abstract

Background and aims: variceal haemorrhage carries a high bleeding mortality in patients with portal hypertension even when ballon tamponade or emergency sclerotherapy are applied. Increasing age, advanced Child-Pugh class hepatocellular carcinoma, early rebleeding after endoscopy, presence of hepatic encephalopathy and renal failure have been shown to influence mortality; however, the factors predicting prognosis have varied between studies. The aim of this study was to identify risk factors related to early mortality from variceal haemorrhage.

Patients and methods: A consecutive series of 235 patients with variceal bleeding was evaluated, they were 203 males (86.4%) and 32 females (13.6%), the mean age was 50.6 ± 11.2 years, etiology of portal hypertension was schistosomal hepatic fibrosis in 23.8%, post hepatic in 13.6% and mixed schistosomal and post hepatic cirrhosis in 62.6%. Pugh-child class showed 44.3% grade A, 42.1% grade B, 13.6% grade C. Emergency endoscopic treatment carried out in less than 24 hours, EIS in 60.8%, EVL in 29.4%, histoacryle injection for gastric varices in 8.9% and combined EIS and EVL in 0.9% of cases. **Results:** Early mortality was reported in 22 patients (9.4%) as a consequence of early rebleeding in 17/22 (77.3%) hepatic coma 3/22 (13.6%) and severe hypovolemic shock 2/22 (9.1%). Early mortality was significantly associated with increasing age ($P = 0.048$), leucocytosis ($P < 0.001$), low hemoglobin level ($P = 0.041$), low haematocrite value ($P = 0.013$), raised serum creatinine ($P = 0.004$), raised serum bilirubin ($p < 0.001$), prolonged prothrombine time ($P = 0.004$), raised serum transaminases ($P < 0.001$), seropositivity of hepatitis markers ($P = 0.002$), DM ($P < 0.004$), pugh-child class C, ($P < 0.001$) and presence of ac-

*tive bleeding during endoscopy P(0.001). **Conclusion:** Increasing age, leucocytosis, reduced red cell mass, decreased hemoglobin level, decreased platelet count, raised serum creatinin, hypo-albuminemia, hypo-prothrombinemia, raised liver enzymes, pugh-child grade C, seropositive hepatitis markers, presence of active bleeding during endoscopy and encephalopathy are risk factors for early mortality.*

Abbreviations: EIS (Endoscopic Injection Sclerotherapy), EVL (Endoscopic Variceal Ligation) and DM (Diabetes Mellitus).

TRANEXAMIC ACID THERAPY AND PERIOPERATIVE BLOOD LOSS IN TOTAL KNEE ARTHROPLASTY

**Reda K. Kamel MD, Hatem El-Moutaz MD*,
Mahmoud A. Awad MD* and Mohamed A. Al-Rabiey MD**

Department of Anesthesia, Faculty of Medicine

Benha and Beni Sweif Universities, Egypt*

Abstract

In this prospective, randomized, double-blind study, we have investigated the effect of an antifibrinolytic agent, tranexamic acid (cyclokapron), on blood loss, transfusion requirements and blood coagulation associated with total knee arthroplasty in forty ASA I/II patients. Tranexamic acid 15mg/kg⁻¹ (n=20) or an equivalent volume of normal saline (n=20) was given 30 min before surgery and subsequently every 8h. for 3 days. Coagulation and fibrinolysis values were measured before administration of tranexamic acid (pre-operative). 8h. after the end of surgery coagulation, fibrinolysis, blood loss are measured and then 24h, 48h and 72h later.

The amount of blood transfused was measured in the two groups. Total blood loss in tranexamic acid group was (665 (348) ml compared with 1406 (616) ml in placebo group (p<0.001), and occurred primarily during the first 24h after surgery. Twelve patients received 1-5 units of packed red blood cells in placebo group compared with two patients in tranexamic acid group, who received 3 units (p<0.001). Post-operative packed cell volume values were higher in the tranexamic acid group despite fewer blood transfusion. Platelet count, PT, aPTT, bleeding time and fibrinogen didn't differ between groups. We concluded that tranexamic acid reduced postoperative blood loss and transfusion requirements associated with total knee arthroplasty.

SYMPATHOVAGAL ACTIVITY IN DIABETES MELLITUS

**Asaad El-Mileegy MD, Khaled Ezam MD,
Ahmed El-Gendy MD and Mahmoud Abd El-Aziz MD***

Departments of Physiology and Tropical Medicine,*

Faculty of Medicine, Mansoura University, Egypt.

Abstract

Background: *Autonomic neuropathy has been reported in diabetic patients but the degree of neurological deficit is variable between these patients.*

Aim: *To assess autonomic dysfunction in diabetic patients.*

Study design: *Autonomic functions using five standard tests were examined in 20 diabetic patients and 20 age and sex matched controls. The extent of autonomic dysfunction was determined in the patients.*

Results: *four (20%) of the diabetic patients were found to have no evidence of autonomic neuropathy. Sixteen (80%) of the patients were found to have evidence of autonomic neuropathy. Of these, three (15%) patients had early parasympathetic damage, five (25%) had definite parasympathetic damage, and eight (40%) had combined (that is, both parasympathetic and sympathetic) damage. Moreover, there was no significant association between subjective symptoms of autonomic neuropathy and objective evidence of autonomic damage as assessed by autonomic function tests. Autonomic dysfunction was significantly more frequent in advanced compared with early diabetes mellitus.*

Conclusion: *This study showed that autonomic neuropathy is common in diabetic patients, and that it increases in severity with increase in extent of diabetes mellitus, suggesting that diabetes mellitus contributes to these neurological derangements.*

COMPARISON BETWEEN SEVOFLURANE ANESTHESIA AND PROPOFLOL ANESTHESIA COMBINED WITH CAUDAL TRAMADOL IN PEDIATRIC PATIENTS UNDERGOING LOWER ABDOMINAL SURGERY

Gamal Z. El-Morsy MD, Hala M. Salah El-Deen MD, Abdelaziz A. M. Metawea MD and Zainab M. Sonbol MD

*Department of Anesthesia and Surgical Intensive Care,
Faculty of Medicine. Mansoura University., Egypt*

Abstract

Prevention of postoperative pain in children is one of the most important objectives of the anesthesiologists. The most common regional anesthetic technique in children is the caudal block. Tramadol is analgesic with micro-opioid and nonopioid activity. In this study we compared the inhalational technique using sevoflurane with the intravenous technique using propofol associated with caudal tramadol.

This prospective randomized study was carried out on 40 children of either sex, ASA I-II, aged 2-7 years admitted at Mansoura University Children Hospital (MUCH) and scheduled for elective lower abdominal surgery.

The children were randomly allocated by the closed envelop method into two groups, each of twenty according to the anesthetic regimen used: In the first group, the initial inhaled dose of sevoflurane was 1% which was increased by 1% increments every 3 breaths, until onset of rhythmic breathing and loss of eyelid reflex occurred, then caudal block (tramadol, 2mg/kg) was established and the anesthesia was maintained with an end tidal sevoflurane concentration of 2.5%. In the second group, induction was done by propofol 2.5mg/kg then caudal block (tramadol, 2mg/kg) was established; the anesthesia was maintained with propofol 200ug/kg/min.

In conclusion, we have demonstrated that sevoflurane compares favorably with propofol regarding ease of induction, hemodynamic stability

and recovery characteristics. However the duration of postoperative analgesia in group I (sevoflurane-caudal tramadol) (15 ± 2.6 hours) was shorter than in group II (propofol-caudal tramadol) (16.6 ± 3.5 hours) but no significant difference was present.

Key words : Pediatric anesthesia, sevoflurane, propofol, caudal tramadol.

DETERMINATION OF THE DOSE OF INTRAVENOUS LIDOCAINE REQUIRED TO SUPPRESS FENTANYL-INDUCED COUGH

**Tarek Badr MD*, Medhat El-Hantery MD
and Essam Makram MD***

*Departments of Anaesthesiology ,Benha Faculty of Medicine Benha University *
and Domitta Faculty of medicine AL-Azhar University, Egypt*

Abstract

This study was done to evaluate the effect of IV lidocaine on fentanyl-induced cough and to determine the minimal dose of IV lidocaine required for suppression of fentanyl-induced cough. For this purpose, 400, non smoker patients between the ages of 13 and 65 years with ASA I and II were scheduled for elective surgery and included in the study. The patients were randomly divided into four equal groups. The patients in group I received intravenous lidocaine, 0.5 mg·kg⁻¹, those of group II received intravenous lidocaine 1.0 mg·kg⁻¹, those of group III received intravenous lidocaine 1.5 mg·kg⁻¹, while group IV was a placebo group. Any episode of cough was classified as coughing and graded as mild (1-2) moderate (3-4) or severe (5 or more). The data were analyzed by test of proportion. Twelve, 14, 12 and 36 patients (12%, 14%, 12% and 36%) had cough in groups I, II, III and IV respectively ($P < 0.05$ in groups I, II, III vs. IV). There was no significant difference in the incidence and severity of cough among the lidocaine pretreated groups ($P > 0.05$). The results of our study suggest that IV lidocaine 0.5 mg·kg⁻¹ is the minimal dose required to suppress Fentanyl-induced cough when administered one minute prior to Fentanyl. Any further increase in the lidocaine dose does not reduce the incidence or severity of Fentanyl-induced cough.

EVALUATION OF THE ROLE OF TRANEXAMIC ACID ADMINISTRATION IN CARDIO-PULMONARY BYPASS

Tarek Badr MD* and Medhat El-Hantery MD

*Departments of Anaesthesiology ,Benha Faculty of Medicine Benha University *
and Domitta Faculty of Medicine AL-Azhar University, Egypt*

Abstract

In this study 67 Patients undergoing elective cardiac surgery with use of cardiopulmonary bypass were treated intraoperatively with tranexamic acid and then were randomized to one of three postoperative treatment groups: group A: 20 patients, infusion of saline for 12 h; group B: 20 patients, infusion of tranexamic acid, $1 \text{ mg} \cdot \text{kg}^{-1} \cdot \text{h}^{-1}$ for 12 h; group C: 20 patients, infusion of tranexamic acid, $2 \text{ mg} \cdot \text{kg}^{-1} \cdot \text{h}^{-1}$ for 12 h. Bleeding was considered to be a primary outcome variable. Hematologic data, allogeneic transfusions, thrombotic complications, intubation time, and intensive care unit and hospital stay duration also were evaluated. No differences were found among groups regarding postoperative bleeding and outcomes; however, the group treated with $1 \text{ mg} \cdot \text{kg}^{-1} \cdot \text{h}^{-1}$ tranexamic acid required more units of packed red blood cells because of a significantly lower basal value of hematocrit, as shown by multivariate analysis. So, prolongation of treatment with tranexamic acid after cardiac surgery is not advantageous with respect to intraoperative administration alone in reducing bleeding and hence blood transfusion. Although the prevalence of postoperative complications was similar among groups, there is an increased risk of procoagulant response because of antifibrinolytic treatment. Therefore, the use of tranexamic acid during the postoperative period should be limited to patients with excessive bleeding as a result of primary fibrinolysis.

SURGICAL TREATMENT OF PULMONARY HYDATID CYSTS: ANALYSIS OF 17 CASES

**Usama A. Hamza MD, Sameh M. Amer MD,
Wael A. Aziz MD, Reda E. AL-Refaie MD,
Mohamed E. Komber MD and Mohamed M. Elsied MD**

Department of Cardiothoracic Surgery, Mansoura University Hospitals.

Running head: Hydatid disease, surgical treatment, complications, Egypt

Abstract

Objective: The aim of this retrospective study is to review the clinical and surgical data of patients with pulmonary hydatid operated in our cardiothoracic surgery department

Patients and methods: We reviewed the clinical and surgical data of 17 patients operated upon at Cardiothoracic Surgery Department Mansoura Faculty of Medicine between 1995: 2005. The collected data included the following: Detailed medical history, physical examination, radiological examination including chest X-ray, C.T. chest, abdominal U/S. Lab. investigations: Casoni test, I.H.A. test, Peripheral eosinophilia. Bronchoscopy and the surgical technique used.

Results: there were 11 males (64.7%), 6 females (35.3%), with mean age 27 years. Haemoptysis was the most common presenting symptom (41.2 %), followed by cough (17.6%), then chest pain (17.6%). Bronchoscopy was performed in (70.5%), was positive in 3 patients (17.6%).

Single cysts were found in (70.6 %) and multiple cysts in (29.4%). Lower lobe cysts were found to be more liable to rupture. Cystectomy (enucleation) with capitonnage was the preferred technique and was used in 11 patients (64.7%). The most common postoperative complication was postoperative air leak, it was not observed in patients who had Cystectomy with capitonnage. All patients had postoperative medical treatment; Albedazole or mebendazole for 6 months. We had no mortality in our study.

Conclusion: The presence of hydatid cysts in the lung is an indication for surgery because of the constant threat to rupture. Surgical excision of

pulmonary hydatid lung cyst with maximum preservation of the lung parenchyma is the main stay of treatment. Management of pulmonary and hepatic cysts simultaneously through the thoracic route is convenient and should be encouraged to reduce incidence of second operation.

SURGICAL TREATMENT OF BENIGN MEDIASTINAL CYSTS: REVIEW OF 30 CASES

**Sameh M. Amer MD, Wael A. Aziz MD,
Noureldeen Noaman MD, Nassr L. Gayed MD,
Reda E. AL-Refaie MD and Mohamed M. Elsaied MD**

Department of Cardiothoracic Surgery, Mansoura University Hospitals.

Running head: mediastinal cyst, surgical treatment, complications, Egypt

Abstract

Objective: *The aim of this study is to review our experience in the surgical management of benign mediastinal cysts, to prove that the complete surgical excision is the treatment of choice, and to analyze the demographic and anatomical characteristics of the cases of benign mediastinal cysts in our locality.*

Patients and Methods: *We reviewed the clinical and surgical data of 30 patients of benign mediastinal cysts operated upon at Cardiothoracic Surgery Department Mansoura Faculty of Medicine between 1995 : 2005. The collected data included detailed medical history, physical examination, radiological examination including chest X-ray, CT and MRI of the chest and mediastinum, echocardiography, abdominal U/S, and routine Lab. investigations. The surgical techniques used and its complications were also reported.*

Results: *Eighteen patients (60%) were male and 12 (40%) patients were female. The mean age of studied patients was 23 ± 16.22 years. Twenty seven (90%) patients were symptomatic and 3(10%) cases were asymptomatic. The most common symptoms were cough (53%), followed by dyspnea (43%) and recurrent chest infection (33%). Bronchogenic cyst was the most common benign cyst 10(33.3%), followed by thymic cyst 7 (23.3%), pericardial cyst 5(16.6%), cystic teratoma 4(13.3%), enteric cyst 3(10%), and epidermoid cyst 1(3.3%). Total excision of mediastinal cysts was done in 29 (96.7%) patients and marsupialization in only one (3.3%) case.*

Conclusion: *The benign mediastinal cysts can occur over a wide*

range of ages with slight male predominance. The bronchogenic cysts are the most common mediastinal cysts. Suspicion of the mediastinal cyst should be raised in case of prolonged chest complaint in spite of good medical treatment. Total surgical excision is the best line of treatment.

FEMORAL ARTERY TO GREAT SAPHENOUS VEIN LOOP ARTERIOVENOUS FISTULA-SHOULD IT HAVE A RENEWED ATTENTION?

Hossam El-Wakeel MD

Department of Vascular Surgery Unit

Mansoura Faculty of Medicine, Egypt

Abstract

The lack of potential upper extremity or chest wall arteriovenous fistula sites due to exhaustion of all upper extremity outflow veins makes vascular access at the femoral region inevitable for a growing number of patients. This report reevaluates femoral artery to saphenous vein loop arteriovenous fistula in the thigh. The study was undertaken between January 2000 and June 2006. Twenty-three patients were included; 15 males and 8 females, their ages ranged from 25-62 years, 6 of whom were diabetic. The cumulative patency rates were 69.6% at 1-year, 55.9% at 2-years and 17.8% at 3-years. Fistulas created with great saphenous vein diameter ≥ 5 mm had significantly higher patency rates than those created with saphenous vein diameter <5 mm. Femoral artery to great saphenous vein loop arteriovenous fistula deserves a renewed attention and it can be an alternative access for those with unsuitable upper extremity sites.

**POPLITEAL ARTERY ENTRAPMENT
SYNDROME (PAES) :
ROLE OF IMAGING IN DIAGNOSIS AND
SURGICAL PLANNING**

Talal Amer MD and Hossam El-Wakeel MD*

*Departments of Radiodiagnosis, Vascular Surgery Unit **

Mansoura Faculty of Medicine, Egypt

Abstract

Popliteal entrapment syndrome is an uncommon cause of calf claudication in young athletic male; it is caused by anomalous relationship of the gastrocnemius muscle and the popliteal artery in the popliteal fossa. Objective: to discuss the role of different imaging modalities in the diagnosis of popliteal artery entrapment with attention to non-invasive modalities and to elucidate their strengths in surgical planning. Patients & Methods: Seven male patients aged (32-55 years) with popliteal artery entrapment were examined in the last 8 years (1998-2006). Different imaging modalities were used in evaluating our patients including Doppler flow imaging, conventional angiography, post contrast axial CT scan of both knees, MRI of both knees, CT angiography and MR angiography. All patients were subjected to surgical exploration 5 via posterior approach and 2 via medial approach. Results: Two patients showed bilateral disease, type I disorder was present in 1 patients (2 limbs), type II in 4 patients (5 limbs) and type III in 2 patients. Type IV, V and VI were not recorded in our patients. Color Doppler imaging showed the arterial changes but failed to describe the abnormal anatomy as CT and MRI. The entrapment test performed by Doppler US gave false positive results in 2/9 (22%), with no false negative results. Cross-sectional imaging (CT and MRI) were conclusive in all 9 limbs. CT angiography and MR angiography showed the arterial changes and gave the images necessary for surgical planning. Excellent outcome was obtained by surgical decompression in all cases with graft in 6 patients (6 limbs). Conclusion: Color Doppler ultrasound shows the arterial obstruction and can suspect the entrapment in non occluded

cases. Other non-invasive modalities as CT and MRI can show abnormal anatomy and confirm the diagnosis. CT angiography and MR angiography can replace conventional angiography in surgical planning. Surgery is mandatory for all diagnosed cases even if asymptomatic to prevent the inevitable arterial damage.

PREVALENCE OF DEPRESSION AMONG PATIENTS WITH ACUTE CORONARY SYNDROME AND ITS RELATION TO TRADITIONAL RISK FACTORS

**Nader El-Shahhat MD, Ashraf Omar MD*,
Wafaa El-Bahaey MD** and Ahmad Dobe MD****

Departments of Cardiology, Internal Medicine** and Psychiatry,
Faculty of Medicine, Mansoura University, Egypt*

Abstract

Background: Strong associations have been reported in patients experiencing depressive symptoms while in-hospital for acute coronary syndrome. The prevalence of major depression is estimated to be between 15-23%, although it is frequently under diagnosed and under treated.

Aim:

1. To determine the prevalence rate of depressive symptoms in patients with acute coronary syndrome who are admitted to our CCU.
2. To determine the impact of clinical depression on those patients during hospital admission.
3. To evaluate any possible relation between depression and other traditional risk factors as age, sex, hypertension, diabetes, smoking, obesity, dyslipidemia and family history of coronary artery disease.

Methods : 90 patients with ACS are subjected to BDI-Fs scores after proper treatment, according to BDI-Fs score patients are divided into 2 groups, patients with no depression (score < 21 points) and patients with depression (score > 21 points).

Results: 16 patients (17.8%) have depression. Significant increase of depression among smokers and patients with dyslipidaemia. Modest association between depression and cardiac events (anginal pain, exertional dyspnea, ventricular arrhythmia and cardiac arrest) . On multivariate regression analysis, smoking is the only predictor for depression among other traditional risk factors for CAD.

Conclusion: *So we conclude that depression and other traditional risk factors especially smoking which is the only predictor for depression, are confounding causes for coronary artery disease, as well as the relation between depressive symptoms and cardiovascular events can't be excluded.*

STUDY OF APOPTOSIS IN PREMALIGNANT AND MALIGNANT LARYNGEAL LESIONS

**Hussam M. Abdul Azeem MD, Ahmed M. Seleit MD,
Nahed S. Khamis MD*, Samy AM. Kalposh MD
and Hany A. Iskander M.Sc.**

Department of ORL. H&N, Banhan Faculty of Medicine.

Department of Pathology, Ain Shams University, Egypt*

Abstract

The rate of cellular growth is mainly influenced by the balance between cell proliferation and cellular decay. Apoptosis is a physiological or programmed cell death controlling cell numbers and its suppression is thought to contribute to neoplasia .

Aims:- The aims of this study were to measure the apoptotic index (AI) in a series of laryngeal neoplasms and to correlate the AI with clinicopathological parameters. Methods:- Sections 5 μ m from 92 laryngeal lesions [14 benign, 21 premalignant and 57 squamous cell carcinomas (SCCs)] were stained by haematoxylin and eosin (H&E) to determine the AI. The SCC. group of patients subdivided into 3 subgroups according to the degree of cell differentiation (SCC. I, SCC. II and SCC. III). The expression of Bcl-2 (proto-oncogene suppresses apoptosis) in the sections was immunohistochemically studied. Results:- The mean AI obtained by H&E staining for benign lesions was (0.067 \pm 0.019) , for premalignant lesions was (0.110 \pm 0.081) and for malignant lesions was (0.076 \pm 0.035). In the sections of SCCs, the mean AI value was (0.101 \pm 0.043) in SCC. I, (0.070 \pm 0.037) in SCC. II and (0.063 \pm 0.025) in SCC. III. Expression of bcl-2 in laryngeal carcinoma is low (23.7%) but with a higher expression in premalignant(30%) and benign(42%) lesions. Conclusions:- (1) Apoptosis is a major factor affecting cancer cells and apoptotic index correlate with histological grade of malignancy. (2) Expression of bcl-2 protein in laryngeal carcinoma is low but with a higher expression in premalignant and benign lesions suggesting that other factors and parameters are involved in controlling apoptosis and cancer cells in the larynx. (3) Haematoxylin

Hussam M. Abdul Azeem, et al....

and eosin staining is a reliable, easy, cheap and practical method for assessing apoptosis. We recommend a large-scale multicenter study of apoptosis to standardize the apoptotic index as a prognostic tool and decision-making parameter in the different treatment protocols of laryngeal carcinoma.

Keywords: Larynx carcinoma, apoptosis, bcl-2, Prognostic parameters.

SPINAL ANAESTHESIA VERSUS COMBINED SCIATIC FEMORAL NERVE BLOCK FOR KNEE ARTHROSCOPY

**Ola Taha A. Dayem MD, Olfat M. Ismail MD,
Abdel Azziz A. Metawea MD and Maha A. Abou Zeid MD**

Department of Anesthesia and Surgical Intensive Care

Abstract

Objective: *This study was designed to evaluate the duration required to perform anaesthesia, achieve surgical block and fulfill standardized discharge criteria for knee surgery with spinal anaesthesia versus combined sciatic - femoral nerve block.*

Method : *Fifty patients ASA 1-11 scheduled for knee arthroscopy were randomized to receive either spinal anaesthesia with 4 mg of 0.5 % hyperbaric bupivacaine (spinal group), or combined sciatic - femoral nerve block with 0.75% ropivacaine and a multiple injection technique (12 ml for femoral nerve block and 18 ml for sciatic nerve block). Time lasting from skin disinfection to the end of local anaesthetic injection (performance time) and then to achieve surgical anaesthesia (readiness for surgery), time required for block resolution, as well as time for discharge were recorded. Occurrence of adverse events was also recorded.*

Results : *Performance time was longer with sciatic femoral block than spinal block while no differences were observed in the time required to achieve anaesthesia (mean time for sensory block was 6.2 ± 1.5 min and 8.8 ± 1.7 min in the spinal and sciatic -femoral block respectively and that for motor block was 9.7 ± 3.6 min and 10.5 ± 3.5 min). No differences in haemodynamic parameter or in the visual analogue scale. Patients in the spinal group showed faster resolution of nerve block however no significant differences were observed in the discharge time*

Conclusion: *Sciatic femoral nerve block with multiple injection technique using ropivacaine 0.75% provided adequate anaesthesia for*

Ola Taha A. Dayem, et al...

knee arthroscopy as spinal anaesthesia with no differences in home discharge and less side effects

Key Words: spinal anaesthesia, sciatic femoral block, knee arthroscopy

FERTILIZATION AND CLINICAL PREGNANCY RATES FOLLOWING CONVENTIONAL IN VITRO FERTILIZATION (IVF) VERSUS INTRACYTOPLASMIC SPERM INJECTION (ICSI) : A PROSPECTIVE RANDOMIZED STUDY USING SIBLING OOCYTES

Hamed M. Youssef MD

*Department of Obstetrics and Gynecology,
Mansoura University, Egypt*

Abstract

Objective: *The aim of this prospective study was to evaluate whether couples with normozoospermic semen undergoing assisted reproduction should be offered conventional IVF treatment or intracytoplasmic sperm injection (ICSI) as the first line of therapy.*

Methods: *In 89 cycles 983 MII sibling oocytes were randomly allocated to either fertilization using conventional IVF (n = 495) or ICSI (n = 488).*

Results: *Fertilization rates using conventional IVF was lower than for ICSI (69% vs. 73%). From the injected (ICSI) oocytes 266 embryos (54.5%) were available for transfer; 272 embryos (54.9%) from IVF. Thirty nine transfers only involved conventional IVF, forty transfers involved only ICSI embryos and 10 transfers involved a mixture of conventional IVF and ICSI embryos. Embryo transfer with embryos generated from conventional IVF demonstrated a higher probability of a clinical pregnancy 33.3% compared to 30% for those embryos generated from ICSI, but none of these parameters reached statistical significance.*

Conclusion: *In conclusion, for couples with normozoospermic semen and no absolute indication for ICSI, conventional IVF which is less manpower, less costly and less time-consuming should be the first choice of fertilization.*

Key words: *Sibling oocytes , IVF, ICSI , normozoospermic semen.*

SURGICAL STABILIZATION OF LOWER LIMBS IN OSTEOGENESIS IMPERFECTA USING MODIFIED SOFIELD-MILLAR OPERATION

Mazen Abulsaad MD

Departments of Orthopaedic Surgery.

Mansoura University Hospital. Mansoura. Egypt.

Abstract

Objective : We present the results of intramedullary rodding of long bones of the lower limbs in children with osteogenesis imperfecta using modified Sofield-Millar operation. **Patients and Methods :** Fourteen patients (mean age at primary operation was 5 years 11 months) was treated with modified Sofiefd-MiRar operation which allows minimal bone exposure, preservation of the pertosteum and keeping the number of osteotomies to the minimum. **Results :** Union was achieved in all cases within seven weeks. Of the 14 patients (29 bones) treated with non elongating rods. rod revisions were needed in 13 patients (26 bones). We found no statistical significant difference between the width of the bone immediately postoperatively and at the final follow up. The walking ability was improved in 4 patients. **Conclusion :** Advantages of less invasive surgery in osteogenesis imperfecta are rapid bone union, no bone airophij or non union, better post operative mobility and small scars.

INTRAOCULAR PRESSURE DURING LUMBAR DISC SURGERY - A COMPARATIVE STUDY BETWEEN PRONE POSITION AND KNEE-ELBOW POSITION

Reda K. Kamel MD and M. Hany A. Salem MD*

*Department of Anesthesia and *Ophthalmology
Benha Faculty of Medicine- Benha University , Egypt*

Abstract

Post-operative visual loss occurs more commonly in spinal surgery. Increased intra-ocular pressure is often implicated in the etiology of post-operative visual impairment. We investigated intraocular pressure in 20 patients undergoing lumbar disc surgery. We classified the patients into two groups:

Group I: patients were in the knee-elbow position with the head resting on a cushion and turned to one side and group II: patients were in prone position and the head neutral. We classified patients in knee-elbow position into two sub-groups; subgroup A where we measured IOP in non-dependant eye and subgroup B where we measured IOP in dependant eye.

In both groups we measured IOP during 2 times, the first time in both group when the patients were awake and in supine position and the second time was in group I at the end of surgery when the patients were still anesthetized and in knee elbow position and in group II at the end of surgery when the patients were still anesthetized and in prone position. In group I after mean duration of surgery 120 ± 18 min. (mean \pm SD), the mean intra-ocular pressure in the non-dependant eye was unchanged when compared to awake state 16.3 ± 2.1 vs. 17.2 ± 3.2 mmHg ($p \geq 0.05$), whereas the intraocular pressure in the dependant eye had significantly increased 17.1 ± 2.2 vs. 19.2 ± 1.1 mmHg ($p \leq 0.05$). In group II after mean duration of surgery 119 ± 19 mmHg, mean intra-ocular pressure had highly significant increase compared to awake state 16.7 ± 2.2 vs. 21.3 ± 2.1 mmHg ($p \leq 0.01$).

We conclude that IOP increased when anesthetized patients are placed in prone position more than when placed in knee-elbow position.

**HEMODYNAMIC AND CATECHOLAMINE
STRESS RESPONSES TO INSERTION OF
THE COMBITUBE AS AN ALTERNATIVE AIRWAY
MANAGEMENT IN GENERAL ANAESTHESIA
FOR CAESAREAN SECTION**

Mahmoud M. Awad MD and Reda K. Kamel MD

*Department of Anaesthesia an intensive care,
Benha Faculty of Medicine, Benha s University, Egypt*

Abstract

The introduction of Combitube to the field of airway management brought about a solution of the problem of difficult airway in trauma patients and during cardiopulmonary resuscitation. This trial was designed to assess the efficacy of Combitube in preventing the lethal complications of failed intubation during caesarean section and compare the haemodynamic and stress response to the device with that resulting from endotracheal intubation. Forty-five healthy parturients scheduled for CS were randomized into three equal groups. Combitube was inserted blindly in group I and facilitated by laryngoscopy in group II. In group III, endotracheal intubation was performed under laryngoscopy. Patients were assessed for the degree of difficulty of insertion of the Combitube, manifestation of regurgitation or trauma to the oropharynx, haemodynamic changes and hormonal response to Combitube insertion and endotracheal intubation. There was no significant difference in the degree of ease on introduction of Combitube in group I as compared to group II. Combitube proved to be a safeguard against regurgitation as group I and II were compared to group III. A high incidence of trauma was noticed in group I during blind insertion of Combitube as compared to laryngoscopy aided insertion in group II or endotracheal intubation in group III. Laryngoscopy aided insertion of Combitube (group II) or endotracheal intubation (group III) produced a significant increase in heart rate as compared to blind insertion in group I. Comparison between groups II & III showed a significant increase in HR in group III. Systolic blood pressure increased significantly in group III while the other two groups manifested an insignificant

increase. Stress hormones manifested increases in all the groups. Nora-drenaline level increased insignificantly in group I and II, while it was statistically significant in group III. Adrenaline levels increased insignificantly in all the study groups. Prolactine level increased insignificantly in group I and manifested a significant increase in groups II & III. This increase was significantly higher in group III as compared to group II. It is concluded that Combitube provides a safe patent airway not only in emergency situations but also in patients scheduled for surgery if they were at risk of aspiration or difficult intubation as those scheduled for caesarean section.

BONE MINERAL DENSITY IN ANKYLOSING SPONDYLITIS

Ahmed M. Dewedar MD and Osama A. Shams MD

*Department of Rheumatology & Rehabilitation,
Faculty of Medicine, Suez Canal University, Egypt*

Abstract

We investigated the frequency and distribution of osteopenia/osteoporosis according to the clinical severity in ankylosing spondylitis (AS). Through clinical examination, laboratory investigations and plain radiography were done to all patients. Twenty three patients with AS were recruited to this study and divided according to the disease severity into 2 groups; mild and advanced. Twelve men with a mean age of 36.6 ± 7.5 years with mild disease of mean duration 8.7 years represented the first group. The second subgroup of patients consisted of 11 men with a mean age of 42.5 ± 10.1 years with severe disease and a mean duration of 11.7 years. Bone mineral density (BMD) was measured in patients with mild and advanced AS with dual energy X-ray absorptiometry (DEXA). Definition of clinical severity was based on the Schöber's test. Twenty two age-matched male subjects had BMD measurements as a control group. Osteopenia was commonly detected (48% in mild AS and 39% severe AS) and, in mild disease, more frequently observed at the lumbar spine than the femoral neck. In severe AS, however, the frequency of osteopenia at the femoral neck was as high as at the lumbar spine. Both bone mineral density and t-scores in severe disease were lower than in mild disease at the femoral neck, but not in the lumbar spine. The progression of osteopenia/osteoporosis may be reflected more reliably at the proximal femur than at the lumbar spine.

**TRIGLYCERIDE AND HIGH-DENSITY
LIPOPROTEIN LEVELS AS MARKERS OF
SYSTEMIC LUPUS ERYTHEMATOSUS ACTIVITY
AND THEIR ASSOCIATION WITH TNF- α
AND TNF RECEPTOR**

**Ahmed M. Dewedar MD, Ali A. Mohammed MD
and Mohammed I. Abdulfattah MD***

*Departments of Rheumatology, Faculty of Medicine, Suez Canal University
Department of Microbiology, Faculty of Medicine, Benha University, Egypt*

Abstract

Objective: *There are some clues that measurement of triglyceride (TG) and high-density lipoprotein (HDL) and their correlation with tumor necrosis factor alpha (TNF- α), soluble TNF- α receptor type 1 and type 2 (sTNFR1, sTNFR2) in serum could be valuable in the assessment of disease activity of systemic lupus erythematosus (SLE) patients.*

Methods: *In this cross-sectional study, fasting blood samples were obtained from 43 SLE patients fulfilling four or more of the American College of Rheumatology (ACR) 1997 revised classification criteria for SLE. Disease activity was determined by using the Systemic Lupus Erythematosus Disease Activity Index (SLEDAI). TG and HDL obtained after overnight fasting were analysed by routine chemistry. Levels of circulating TNF- α , sTNFR1, and sTNFR2 were determined by enzyme-linked immunosorbent assay.*

Results: *Triglyceride levels were associated with SLEDAI ($r = 0.59$, $P < 0.001$), TNF- α ($r = 0.27$, $P < 0.01$), and with sTNFR1 ($r = 0.54$, $P < 0.001$); on the contrary, HDL levels were negatively associated with SLEDAI ($r = -0.29$, $P < 0.007$), TNF- α ($r = -0.27$, $P < 0.01$), and sTNFR1 ($r = -0.35$, $P < 0.001$). The correlation of TG and HDL with sTNFR2 were ($r = 0.13$, $P > 0.23$) and ($r = -0.17$, $P > 0.1$), respectively. In multiple logistic regression models, the levels of TNF- α and HDL were omitted.*

Conclusion: *Dyslipoproteinemia with high TG/low HDL levels correlates with disease activity in SLE, and enhanced activity in the TNF- α /*

Ahmed M. Dewedar, et al....

sTNFR system. With results of this study and similar studies, serum levels of TG, HDL, TNF- α , sTNFR1, sTNFR2 are valuable markers for estimation of disease activity in SLE.

DISTURBED METHIONINE CYCLE INTERMEDIATES, LIPID PEROXIDES, URIC ACID AND FIBRONECTIN IN RELATION TO SEVERITY OF PREECLAMPSIA

Kamal Anwar MD and Amany Atwa MD*

*Departments of Obstetric & Gynecology¹ and Medical Biochemistry**

Faculty of Medicine, Mansoura University, Egypt

Abstract

Objectives: To evaluate the plasma levels of methionine cycle intermediates; S-adenosylmethionine (SAM) and S-adenosylhomocysteine (SAH), lipid peroxides marker; malondialdehyde (MDA), uric acid and cellular fibronectin (cFn) in preeclamptic patients and their relations to the severity of disease.

Subjects & Methods: This study included 35 preeclamptic primigravida women; 19 mild and 16 severe preeclampsia. Eighteen age-matched healthy primigravidas were chosen as control group. Plasma levels of adenosylmethionine (SAM), S-adenosylhomocysteine (SAH), lipid peroxides marker; malondialdehyde (MDA), uric acid and cellular fibronectin were compared between normal pregnant, mild and severe preeclamptic pregnant women. High Performance Liquid Chromatography equipped with a reversed-phase column-C18, and UV detector at 254 nm was used to separate SAM and SAH. Serum uric acid and MDA levels have been assayed by colorimetric methods. Serum cellular fibronectin was estimated by ELISA. Statistical analysis was performed using Mann Whitney u test and Spearman correlation analysis.

Results: Plasma levels of SAH, MDA, and cellular fibronectin were significantly increased in mild and severe preeclamptic groups compared with control group ($P < 0.05$). Also, these parameters were significantly higher in severe preeclamptic group than mild preeclamptic group ($P < 0.05$). However, uric acid levels showed a significant increase in severe preeclamptic group compared with mild preeclamptic and control groups

($P < 0.05$) while insignificant difference was observed between mild preeclamptic and control group ($P > 0.05$). SAM levels were significantly decreased only in severe preeclampsia than control ($P < 0.05$). Moreover, there were positive correlation between cellular fibronectin and SAH, MDA and uric acid.

Conclusion : Disturbed methionine cycle intermediates; s-adenosylhomocysteine and s-adenosylmethionine, lipid peroxides, uric acid and fibronectin are important factors in the pathogenesis of preeclampsia and are directly related to its severity. Furthermore, cellular fibronectin correlated positively with SAH, MDA, and uric acid suggesting that these parameters have a primary role in endothelial dysfunction.

Key words: Methionine, S-adenosylmethionine (SAM), S-adenosylhomocysteine (SAH), lipid peroxides, uric acid, cellular fibronectin, endothelial dysfunction, preeclampsia .

**RAPID DETECTION OF METHICILLIN -
RESISTANT STAPHYLOCOCCUS AUREUS
(MRSA) BY: DISK DIFFUSION, E-TEST, LATEX
AGGLUTINATION TEST AND REAL -TIME PCR**

**Soheir Abd El-Rhman MD, Sahar M. Fayed MD
and Nagwa Abd El-Ghany Khamis MD***

*Department of Clinical and Chemical Pathology, Faculty of Medicine ,
Benha University and Ain Shams University*, Egypt*

Abstract

Methicillin resistant Staphylococcus aureus (MRSA) is an important pathogen causing severe nosocomial infections whose prevalence has been increasing. The effectiveness of infection control measures is enhanced by early detection of resistant isolates and this is dependent on the time taken to isolate and identify MRSA in specimens taken from infected patients and in screening specimens taken to identify patients colonized with MRSA. So we aimed in this study to evaluate the abilities of phenotypic methods (Disk diffusion , E-test and Latex agglutination test) and genotypic method (real time PCR) for rapid detection of methicillin resistance in S. aureus. It was done on 220 patients (155 males and 65 females) at Benha University Hospital during the period from March to September 2005 to isolate any growth of S. aureus. Two hundred and twenty clinical samples were collected; they were 140 pus samples, 48 urine samples and 32 blood samples. Pus and urine samples and positive blood cultures were cultured to isolate any growth of S. aureus then the isolated colonies were examined for identification of MRSA isolates by disk diffusion method(Ox 1µg, Ox 5µg and Fox 30µg), E-test , PBP2a latex agglutination test and detection of mecA gene by real time PCR .

Two hundred isolates were detected in 220 clinical samples The frequency of S. aureus isolates was 28% (56 out of 200 isolates) they were mainly from wound pus (36 out of 56).The mec A PCR assay allowed us to classify 22(39.3%) of the isolates as S. aureus mec A-positive and they were mainly from pus(12 out of 22)and blood (6 out of 22). and 34

(60.7%) as *S. aureus* *mecA* negative. When phenotypic and genotypic identification was compared with PCR results it was found that by oxacillin 1 μ g disk, the sensitivity was 90.9% and the specificity was 94.1%, by oxacillin 5 μ g disk, the sensitivity was 90.1% and the specificity was 76.5%, while cefoxitin 30 μ g disk yield 100% sensitivity and 94.1% specificity. Oxacillin E-test strips had the same sensitivity and specificity of oxacillin 1 μ g disk. Latex agglutination test and real time PCR had the best sensitivity (100%) and specificity (100%) and they are able rapidly and reliably to detect MRSA isolates.

In conclusion: the new molecular assay (real time PCR) was found to be rapid and robust because it is a largely automated assay, less hands-on work is needed, consumes shorter time than conventional PCR and it can be used for direct detection of MRSA from non sterile clinical specimen, however, it is not yet available in the majority of routine diagnostic laboratories because of their elevated technical requirements. In absence of real time PCR, latex agglutination test is the best method for MRSA detection from isolated colonies.

PULSE PRESSURE AND INFLAMMATORY MARKERS IN SUBJECTS WITH TYPE 1 DIABETES MELLITUS

Hala Abd El-Hafez MD and Mohammed M. El-Arman MD*

*Departments of Internal Medicine and Clinical Pathology**

Faculty of Medicine, Mansoura University, Egypt.

Abstract

Aim and background: Type 1 diabetes is associated with excessive cardiovascular risk and earlier age-related increase in pulse pressure (PP). Inflammation and PP are predictors of cardiovascular disease. However few data suggested that PP may stimulate inflammation. Therefore, the present study aimed to determine the levels of some inflammatory markers (tumour necrosis factor alpha, interleukin-6 and C-reactive protein) and to study the relation between PP and these markers in normotensive subjects with type 1 diabetes mellitus with and without microvascular complications.

Methods: The present study included 50 normotensive subjects (<130/85 mmHg) with type 1 diabetes mellitus (T1DM), 24 of them with microvascular complications (mean age 39.6 ± 5.4 years) and 26 of them without microvascular complications (mean age 29.7 ± 6.9 years) 20 healthy subjects (mean age 33.3 ± 8.5 years) were selected as a control group. Recorded data included age, sex, duration of diabetes, body mass index (BMI), waist-to-hip ratio (WHR), systolic blood pressure (SBP), diastolic blood pressure (DBP), pulse pressure (PP), mean arterial blood pressure (MAP), microvascular complications, lipid profile, HbA1c, estimated glucose disposal rate (eGDR) and serum concentration of tumour necrosis factor-alpha (TNF- α), interleukin-6 (IL-6) and C-reactive protein (CRP).

Results: Compared with control subjects, diabetic patients with and without microvascular complications had higher PP (47 ± 3 & 41 ± 4 vs 37 ± 4 , $P < 0.001$ & $P < 0.01$ respectively), CRP (6.04 ± 0.6 & 4.11 ± 0.64 vs 2.59 ± 0.57 , $P < 0.001$, both), IL-6 (31.66 ± 3.3 & 21.38 ± 3.62 vs 11.5 ± 2.81 ,

P<0.001 both), and TNF- α (66.45 \pm 12.66 & 37.26 \pm 8.17 vs 32.05 \pm 6.3, *P*<0.001 & *P*<0.05 respectively). PP, CRP, IL-6 and TNF- α were elevated (*P*<0.001, all) in diabetic patients with versus those without microvascular complications. CRP, IL-6 and TNF- α levels were higher in diabetic patients with macroalbuminuria compared to those with microalbuminuria (*P*<0.05 & *P*=0.012 and *P*<0.001 respectively). PP in diabetic patients showed significant correlation with micro and macrovascular complications (*P*<0.0001). CRP, IL-6 and TNF- α in diabetic patients had significant correlation with PP (*r*=0.722, *P*<0.0001 & *r*=0.770, *P*<0.0001 & *r*=0.775, *P*<0.0001 respectively) and diabetic micro and macrovascular complications (*P*<0.0001).

Conclusion: In normotensive subjects with type 1 diabetes mellitus, inflammatory markers and PP are increased and have significant relation with each other and with diabetic microvascular complications. So, lowering of both PP and inflammation might be helpful to optimize therapeutic management of vascular disease in type 1 diabetes.

ROLE OF SPIRAL CT SCAN AND ENDOSCOPIC ULTRASONOGRAPHY IN ASSESSING OPERABILITY OF PERI-AMPULLARY TUMORS

**Bassem Hegab MD MRCS, Ahmed F. El-Kased MD MRCS,
Maher Osman MD, Atef Abdelghany MD**,
Hussein Okasha MD***, May Fawzi MD***,
Ahmed El-Badry MD*** and Enas M. Korayem MD******

*Departments of Surgery and Radiology****. National Liver Institute,*

Department of Surgery, Faculty of Medicine, Menufiya University*

*Departments of Surgery, Benha University**, Internal Medicine, Cairo University***, Egypt*

Abstract

Introduction: Pancreatic cancer is associated with an extremely poor prognosis with less than 5% of patients surviving 5 years after the diagnosis. Current preoperative staging modalities include various cross-sectional imaging techniques, including spiral CT and endoscopic ultrasound (EUS). Aim of the work: This prospective study aimed at demonstrating the role of spiral CT and endoscopic ultrasonography in early diagnosis staging and assessment of operability of periampullary tumors. Patients and Methods: Sixty-two patients with periampullary tumors were included in this study. All cases were subjected to abdominal ultrasound, Spiral CT, ERCP, EUS and operative interference. Surgical findings were considered the gold standard for assessing the sensitivity of spiral CT and EUS in diagnosing, staging and estimating resectability of periampullary tumors. Results: Endoscopic Ultrasonography was very sensitive in detecting periampullary masses (93.5%) especially masses smaller than 20mm while the sensitivity of spiral CT was 71%. EUS was also very sensitive in detecting ampullary masses (100%) in contrast to spiral CT that missed the diagnosis of the 14 ampullary masses found in our work. EUS was more sensitive than Spiral CT in detecting malignant vascular invasion (95% versus 75%) while it was slightly less specific than spiral CT in that context (74 versus 80%). The predictive value of

spiral CT was 60% for tumor resectability while it was 100% for tumor unresectability. The predictive value of EUS was 73.5% for tumor resectability while it was 96.4% for tumor unresectability. When combining both techniques the predictive value for tumor resectability was 65% while it was 100% for tumor unresectability. No complications were encountered in both techniques. Conclusions: We concluded that EUS is more sensitive than spiral CT in detection and staging of periampullary masses. Also, the non-invasive spiral CT and the minimally invasive EUS are very valuable tools in predicting unresectability of periampullary masses while EUS is slightly more valuable in detecting tumor resectability.

SERUM LEVEL OF TUMOR NECROSIS FACTOR- α IN PATIENTS WITH HEPATIC ENCEPHALOPATHY DUE TO CHRONIC LIVER DISEASES

**Atef H. Asal MD, Mohamed A. Ali MD,
Yaser A. Shaheen MD, Mohamed A. Metwally MD
and Yaser Ismail MD***

Departments of Hepatology, Gastroenterology and Infectious Diseases and

**Clinical Pathology, Faculty of Medicine, University of Banha , Egypt*

Abstract

Tumor necrosis factor- α (TNF- α) is involved in many acute and chronic liver disease (CLD). This work was conducted on 69 patients with CLD (50 patients with overt hepatic encephalopathy (HE) and 19 patients with no evidence of HE) and 13 healthy subjects as a control group. The aim was to assess the serum level TNF- α in patients with HE due CLD and to correlate this level with the severity and precipitating factors of HE. All patients and control subjects were subjected to clinical, laboratory and abdominal ultrasonography in addition to measurement of serum level of TNF- α .

Results: *HE was more common in male patients ($P < 0.002$) but not related to the age ($P = 0.826$). Serum TNF- α level was significantly elevated in patients with CLD in comparison with the control and patients with overt HE than those with no evidence of HE (16.88 pg/ml, 33.85 pg/ml and 78.48 pg/ml) respectively. TNF- α was positively correlated to the synthetic liver function but not related to the liver enzyme levels. TNF- α was positively related to the severity of liver disease represented by Child-Pugh score ($P < 0.001$) being highest in Child C patients. The serum level of TNF- α was significantly correlated to the severity of HE reaching its highest levels in Grade IV, but not related to the precipitating factors of HE.*

Conclusion: *serum level of TNF- α was higher in cirrhotic patients with HE and correlates with severity but not the precipitating factors of HE.*

CORRELATION BETWEEN CLINICAL PRESENTATION AND GENOTYPES OF HUMAN GIARDIASIS

**Atef M. El-Shazly MD, Mohamed Soliman MD,
Mostafa El-Kady MD*, Yaser A. Shaheen MD*
and Doaa Sultan MD**

Department of Parasitology Faculty of Medicine, Mansoura University,

**Department of Hepatology, Gastroenterology and Infectious Diseases,*

Banha Faculty of Medicine, Banha University , Egypt

Abstract

Objectives: *the aim was to study the genotypes of human giardiasis and its relation to the symptoms of the clinical presentation.*

Methods: *105 patients, with giardiasis in the stool, 61 were symptomatizing and 44 were asymptomatic, and 20 subjects serving as a control group with negative stool examination for giardiasis, all were examined by PCR of stool to detect genotypes of G.L.*

Results: *PCR detected G.L. in 73.3% and failed to detect G.L. in 26.7% of cases with G.L. in stool, and was negative in all control subjects, this mean, RCR specificity is 100% and sensitivity 73.3% for G.L.*

Three genotypes were detected, genotypes I in 36.19%, genotype II in 12.38% and genotype III in 9.52%, and mixed genotypes were detected in 15%, of cases with G.L.

In the symptomatic patients genotype I was 32.79%, genotype II was 16.39% and genotype III was 9.64%, mixed genotypes infection in 16.39% and undetermined genotypes was 24.59% while in the asymptomatic group, genotype I detected in 40.91% genotype II in 6.82%, genotype II in 9.59% mixed genotypes in 13.64% and undetermined in 29.55%. There was no statistically significant difference between symptomatic and asymptomatic group regarding G.L. genotype distribution and the genotype of G.L. was not related to symptoms of clinical presentation.

Conclusion: *the study revealed genetic diversity of G. Lamblia infec-*

Atef M. El-Shazly, et al...

tion in the studied population and the genotypes of G.Lamblia were not related to the symptoms of clinical presentations.

SHOULDER ARTHRODESIS USING DOUBLE PLATING TECHNIQUE FOR FLAIL SHOULDER SECONDARY TO BRACHIAL PLEXUS PALSY

Mahmoud I. El-Hadidi MD

*Department of Orthopaedic Surgery,
Faculty of Medicine, Mansoura University., Egypt*

Abstract

Twelve patients who had a flail shoulder due to brachial plexus palsy had arthrodesis of the shoulder using double plating technique with two pelvic-reconstruction plates. Both the glenohumeral and the acromio-humeral joints were fused with the shoulder in the position of 20 degrees of abduction, 30 degrees of flexion, and 40 degrees of internal rotation. Bone graft from the posterior part of the fused humeral head was used in all cases. The patients were immobilized in broad arm pouch sling postoperatively. At an average follow-up of twenty months after the operation, the position of the arthrodesis had been maintained and solid fusion had occurred in each shoulder. No patient required removal of the plates. The pelvic-reconstruction plate is malleable and is more easily contoured in the operating room than a dynamic compression plate.

We recommend the use of a malleable pelvic-reconstruction plate with double plating technique when performing arthrodesis of the shoulder without the need for postoperative immobilization in cast spica. Also we are recommending the internal position of the humeral head in 40 degrees with added privilege of using the projected posterior portion of the head, from that position, as a good donor site for cancellous bone graft.

**AVASCULAR BONE NECROSIS OF THE
FEMORAL HEAD AMONG LIVE-DONOR
RENAL ALLOGRAFT RECIPIENTS:
A SUCCESSFUL SURGICAL MANAGEMENT**

Mahmoud El-Hadidi MD

*Department of Orthopaedic Surgery, faculty of medicine,
Mansoura university, Egypt*

Abstract

Avascular bone necrosis (AVN) of femoral head in renal allograft recipients receiving corticosteroid therapy is a disabling problem in this unique group of patients. We report the results of treatment of sixty two hips with radiologically proven AVN in 47 recipients who were categorized into two groups according to the grade of AVN.

Group I included early AVN, positive MRI but normal X-ray, and that was encountered in 31 hips in 22 recipients (9 patients with bilateral hip affection), while group II included advanced AVN and was encountered in 31 hips in 25 recipients (6 patients with bilateral hip affection). The mean age in group I was 29 years (range 20-49 years), while in group II was 30 (range 20-42 years). Core decompression was performed in all hips of group I, while patients in group II were subjected to either cemented or cementless total hip replacement. The average follow-up was 36 months (range 10-42 months).

The results were assessed by clinical and imaging follow-up examinations. MRI (for group I patients) and plain radiographic examinations were repeated within 4-12 months' duration. In group I, the outcome was considered successful if there was no clinical or radiographic progression of the operated hips, hence any need for subsequent surgery during the duration of the study. The success rate of core decompression was 82% in early AVN. In group II; Harris hip score improved from average 35 points preoperatively to 94 points postoperatively with excellent and good results in all patients (100%).

We believe that, although total hip arthroplasty would be the treatment of choice in disabling osteonecrosis in renal transplant recipient, early detection of AVN by MRI warrants special attention to avoid the potential hazards of total hip replacement in this group of immunocompromized patients.

**STUDY OF URINARY IODINE AS AN
INDICATOR OF IODINE DEFICIENCY
AND ASSOCIATED CLINICAL SIGNS AND
SYMPTOMS IN A SAMPLE OF BASIC SCHOOL
CHILDREN IN MENOUF DISTRICT
*MENUFIYA GOVERNORATE***

**Gaafar M. Abdel-Rasoul MD, Rabei A . Al-Bahnasy MD,
Manal A. Al-Batanony MD, Maathir K. El-Shafie MD*
and Dalia A.Abd-Ellah MD**

Departments of Public Health and Community Medicine, Medical Biochemistry,
Faculty of Medicine, Menou fiya University, Egypt.*

Abstract

Iodine deficiency is a major public health problem, particularly for pregnant women and young children, and is the commonest cause of preventable mental retardation as well as endemic goitre, especially in developing countries. The aim of the study was to measure the urinary iodine concentration among a sample of basic school children to detect the magnitude of the problem of iodine deficiency, detect the prevalence of goitre among the studied sample and study of relevant symptoms and signs in those diagnosed to have iodine deficiency. The study was carried out on 421 students selected from Menofiya governmental basic school children with age range 6-14 years. All the students were subjected to full history taking, general medical examination, local examination of the neck and laboratory investigations including determination of urinary iodine and measuring of total T3 and T4 thyroid hormones for (40 students) with iodine deficiency, and (10) students who had normal urinary iodine concentration. The study showed that the majority (51.1 %) of the studied group had mild iodine deficiency, (18.5%) had moderate deficiency, (7.8%) had severe deficiency, and only (22.6%) had normal urinary iodine concentration using WHO recommended cut off values. A significant difference between the two goitre grades (grade 0 and grade 1) regarding the mean value of urinary iodine concentration level ($P < 0.001$), a signifi-

cant difference between different patterns of iodine deficiency as regard the mean value of T4 thyroid hormone ($P < 0.05$), but not with T3 ($P > 0.05$). Children not suffering from iodine deficiency showed normal values of T4 but lower values were found in those suffering from iodine deficiency. Easy fatigability, pallor and constipation were more prevalent among those students with severe iodine deficiency compared to those suffering from mild and moderate deficiency and those having normal urinary iodine ($P < 0.05$). It could be concluded that urinary iodine concentration was decreased in all goitrous children, so we recommend routine urinary examination for iodine concentration for school children at school entry to detect those with moderate and severe iodine deficiency to be subjected with their families to health education program about the health hazards of iodine deficiency and the importance of the usage of iodized salt.

**CLINICAL AND FUNCTIONAL OUTCOME OF
MULTIPLE LAMINOTOMY TECHNIQUE IN
THE TREATMENT OF LUMBAR
SPINAL STENOSIS**

**George W. Boghdady MD,
Maged M. Elshennawy MD, Wael A. El-Adl MD,
and Mohammed M. Wahba MD***

Department of Orthopaedic Surgery and Traumatology,
Mansoura University, Mansoura, Egypt*

Abstract

Lumbar spinal stenosis is the narrowing of the osteoligamentous vertebral canal causing compression of the neural elements within the spinal canal, the lateral recesses, or intervertebral foramina. Surgery aims to decompress the nervous structures, particularly the nerve roots, without compromising vertebral stability. Different surgical modalities have been implicated with different success rates. The purpose of this study is to assess the clinical and functional outcome after multiple laminotomy in treatment of lumbar spinal stenosis. Fifty-six patients with lumbar canal stenosis were operated on using the multiple laminotomy technique after adequate unsuccessful conservative treatment. Far lateral superior and inferior laminotomies limited to one half of the superior lamina and one quarter of the inferior lamina together with the intervening ligamentum flavum were performed. Attention was given to lateral recess and root canal decompression. In 8 patients multiple laminotomies failed to achieve adequate decompression due to absolute stenosis, and were excluded from the results. Patients were followed up for a mean period of 27.63 ± 10.56 months and assessed according to the Japanese Orthopaedic association (JOA) score. Satisfactory (excellent and good) results were obtained in 87.5% of the patients with mean recovery rate of JOA score of 65% ($P < 0.000$). Six minor dural tears without residual neurological signs were recorded. Permanent neurological (root) injury was recorded in only 2 patients. Results of the present study proved multiple laminotomy

George W. Boghdady, et al...

technique to be the procedure of choice for mild to moderate developmental and degenerative stenosis.

**A MODIFIED RING FIXATOR DEVICE
IN THE TREATMENT OF INTERTROCHANTERIC
FEMORAL FRACTURES UNDER
LOCAL ANAESTHESIA**

**Maged M. Elshennawy MD, George W. Boghdady MD
and Ayman M. Ali MD**

*Department of Orthopaedic Surgery and Traumatology
Mansoura University, Mansoura, Egypt.*

Abstract

In 19 high-risk patients intertrochanteric fractures were treated with a case by case pre-operatively assembled ring fixator according to the patient's own neck shaft angle of the healthy side under local anaesthesia, in the Orthopaedic Surgery Department of Mansoura University Hospital between January 2005 and July 2006. They were selected because of their high surgical or anaesthetic risk, and evaluated by radiographs immediately after operation, and at 3 week interval follow up visits, there was early lost follow up for one death due to medical causes unrelated to the surgical procedure. A short intraoperative time (25 minutes), no need for blood transfusion, fast ambulation and an average hospitalisation of 3 days, were noted. All fractures healed within 17 weeks. All patients had a superficial pin tract infection but deep one was seen in one patient (5%), and in 3 patients the fracture united with a limb shortening of 15 mm (10-20 mm). No implant failures or limitation of knee movements were recorded. There were 16 good results, two acceptable and one poor result at final follow up. This multi-planner ring fixator can be used successfully for the treatment of elderly high-risk patients with intertrochanteric fractures providing satisfactory stability and early weight-bearing.

CAUDAL ADDITIVES IN PEDIATRIC : TRAMADOL VERSUS KETOROLAC

Ola Taha A. Dayem MD

Department of Anaesthesia

Faculty of Medicine, Mansoura University, Egypt

Abstract

Background: Lower abdominal and genitourinary surgeries are often associated with appreciable postoperative pain in children. A single caudal injection provides analgesia only for the duration of action of local anaesthetic. Epidural tramadol has been used to provide analgesia in adult patients without any adverse effects. Also ketorolac has been used intrathecally and caudally and produced postoperative analgesia. We conducted this study to determine the efficacy and safety of adding tramadol or ketorolac to bupivacaine in prolonging duration of caudal analgesia.

Methods: This double blind study was conducted in 60 children, aged 2-10 years and undergoing lower abdominal or inguinal surgery. After administration of general anesthesia, patients in group B(bupivacaine) (n= 20) received caudal epidural injection of 0.25% bupivacaine 1ml/kg, those in group BT (bupivacaine - tramadol) (n=20) received 0.25% bupivacaine 1ml/kg and tramadol 2 mg/ kg and group BK (bupivacaine - ketorolac) (n=20) received 0.25% bupivacaine 1ml/kg and ketorolac 0.4 ml/kg. Total volume of caudal epidural injection in all patients was 0.5 ml/kg with maximum volume 20 ml. No premedication or intraoperative analgesic was given. Heart rate, blood pressure, respiratory rate, TPPPS pain score and side effects, were recorded for 24 hours postoperatively. Rescue analgesia was given in the form of paracetamol injection 10 mg/ kg IM. and total number of doses of analgesic required in the first 24 hours was recorded.

Results : Median pain scores showed no significant difference among the three groups in the first 2 hours postoperative, but there were significantly lower scores in Group BT and Group BK after 4 hours compared with Group B ($p < 0.05$) for the rest of monitoring period. duration of anal-

gesia time to first rescue of analgesia were prolonged in the two additive groups compared to the group B . There were no significant side effects in the three studied groups .

Conclusion : *addition of both tramadol and ketorolac to caudal bupivacaine improve the quality and duration of analgesia with noadverse effects.*

Key words: *Tramadol, ketorolac, caudal block, postoperative analgesia*

NEUROPHYSIOLOGIC AND PSYCHOMETRIC CHANGES IN PATIENTS WITH LIVER CIRRHOSIS

**Sabry A Abdou MD, Amany H Lashin MD,
Yaser A. Shaheen MD, Mohamed A. Metwally MD
and Hesham Al Sayed MD***

*Departments of Hepatology, Gastroenterology, and Infectious Diseases, and
Psychiatry, Banha Faculty of Medicine, Banha University, Egypt.

Abstract

Because of its prognostic and socioeconomic relevance, interest has focused on SHE, which describes a poorly defined syndrome found in the grey zone between normality and manifest HE.

Background: *the aim was to study the neurophysiologic and neuropsychologic changes in chronic liver diseases to diagnoses subclinical hepatic encephalopathy (SHE).*

Methods: *Sixty patients with chronic liver disease 30 had cirrhosis due to chronic HCV (group1), and 30 patients had liver fibrosis due to Schistosomiasis (alone or with hepatitis) (group2), and 20 healthy subjects as control (group 3), all were subjected to, clinical examination, assessment of liver function, routine lab., investigations, Abd., US, and EEG and psychometric assessment by (NCT) and symbol (SDT).*

Results: *NCT abnormal score was found in 46.7% group2, ranging from 42.3% to 75% in Child-Pugh grade A, B respectively, however the control group had normal NCT score. Positive EEG changes were in (60%)and (50%) ranging from (47.05% to 76.92%) and from (46.15% to 75.0%), in group1and group2 in Child-Pugh grade A and B, respectively, while in group3 EEG was normal in (90%) and non specific changes found in(10%).*

Conclusion: *EEG changes and psychometric defects were detected in considerable percentage of cirrhotic patients and were related to the severity of liver cirrhosis, so psychometric tests and EEG may be suitable tools for diagnosis of SHE.*

**FACTORS ASSOCIATED WITH INTESTINAL
PARASITIC INFECTION AMONG SCHOOL
CHILDREN IN SIRT, LIBYA**

Aida A. Abdel-Magied MD and Abdulla M. Elahwel MD*

*Department of Parasitology, Faculty of Medicine, Mansoura University, Egypt
and Department of Infectious Disease and Tropical Medicine,
Faculty of Medicine, Altahadi University, Sirt, Libya**

Abstract

A parasitological survey of 601 school children aged 7-14 years in the city of Sirt was carried out. Our objective was to determine the prevalence of intestinal parasitic infections and their association with sociodemographic factors and hygienic habit. Data collected via questionnaires. Fecal samples were examined by wet film ,iodine preparation, concentrations methods and modified Ziehl-Neelsen stain . The prevalence rate of intestinal parasitic infection among the students was 63.6 %. Co infection with two or three parasites was seen in 11.4%. The three most common were Giardia lamblia 28.8%,Entamoeba histolytica 16.3% and Entamoeba coli 6.3%. Parasitic prevalence was higher in boys ,younger age in children with non educated mother and in children who sometimes wash hands after defecation .According to the results , mother education and personal hygiene of the students were the significant associations .

ULTRASTRUCTUREAL CHANGES OF AMINOGLYCOSIDES ON RATS

**Mohamed A. El- Shishtawy MD,
Abd El-Latif El-Balshy MD and Essam M. Mehlap MD**

*Departments of Forensic Medicine & Clinical Toxicology, Pathology and Anatomy
Benha Faculty of Medicine, Zagazig University, Egypt*

Abstract

Gentamicin, one of the aminoglycoside antibiotics, was administered intraperitoneally twice a day at a dose of 4 mg/kg body weight, a dose relevant to those used in the clinical practice. The kidney and liver were examined by light (semithin sections) and electron microscopy after 2,7 and 14 days of treatment. Biochemical changes were also studied after the same periods and were found to be statistically insignificant even after 14 days. However, morphology of the liver and kidney, examined by light microscopy, was unchanged throughout the whole period of the study as compared with controls. The renal ultrastructural changes detected were dependent on the duration of drug administration and confined primarily to the proximal tubule. Specific lysosomal alterations were detected as early as 2 days of treatment, these consisted of increased number of cytosegresomes, many of which contained electron -dense multilamellar structures 'myeloid bodies'. Alterations of the other sub-cellular structures were observed only after 7 and 14 days of treatment, the golgi apparatus became hypertrophied and the number of ribosomes were increased. Later, the mitochondria were affected giving the picture of megamitochondria. In addition, distal tubular cells showed marked vacuolization and disruption of the basal cell architecture. The most striking hepatic changes were prominent proliferation of perixosomes, prominent increase in smooth endoplasmic reticulum and a disruption of the rough endoplasmic reticulum. Thus these early ultrastructural alterations may indicate that therapeutic doses of gentamicin can induce renal and hepatic dysfunction in humans. This may be an important fact on limiting the clinical utility of gentamicin.

COMPARATIVE STUDY BETWEEN VIRTUAL LARYNGOSCOPY AND DIRECT LARYNGOSCOPY IN DIAGNOSIS OF CANCER LARYNX

**Ahmed Seleit MD, Moharram El Badawy MD*,
Ahmed S. El-Kady MD and Shreef A. Aziz MD****

Departments of Otorhinolaryngology, Radiology and Surgical oncology**,*

Faculty of Medicine and National Cancer Institute,***

Benha and Cairo,** Universities, Egypt*

Abstract

The purpose of this study was to evaluate the accuracy, clinical value and limitation of virtual laryngoscopy in diagnosis of cancer larynx in comparison to direct laryngoscopy with histopathological correlation. Thirty patients diagnosed clinically and proved pathologically as laryngeal carcinoma were subjected to fiberoptic endoscopy (FO), biopsy, spiral computed tomography (CT), and virtual laryngoscopy (VL). The accuracy of fiberoptic endoscopy, virtual laryngoscopy and CT was estimated with pathological correlation. It was found that, the accuracy of fiberoptic endoscopy, virtual laryngoscopy and CT for detection of the site of the lesion was different. Regarding to the epiglottis, the accuracy of FO, VL and CT, were 100%. As for the false vocal cord, the accuracy of FO was 81% while CT and VL were 100%. For the ventricle, the accuracy of FO was 71% while VL and CT were 100%. For the true vocal cord, the accuracy of FO was 70% while in CT and VL was 100%. For the anterior commissure, the accuracy of FO was 72%, VL was 94% and CT was 100%. For the posterior commissure, the accuracy of FO was 50%, VL was 83% and CT was 100%. For the subglottic region, the accuracy of FO was 62% while 100% in virtual and CT. For the vallecullae, the FO, VL and CT showed the same accuracy, 100%. In conclusion, virtual laryngoscopy is sensitive in assessment of the larynx beyond the large supraglottic and glottic masses obscuring the view of fiberoptic endoscopy. It is particularly useful in the presence of severe laryngeal stenosis especially in the sub-

glottic regions and does not require sedation and additional scanning. It is of a value in follow up patients with previous laryngeal carcinoma treated by radiotherapy or conservative surgery. On the other hand, virtual laryngoscopy show limits in the identification of early laryngeal lesion which can be detected by fiberoptic endoscopy.

SUBCLINICAL NEUROLOGICAL AFFECTION IN PATIENTS WITH CHRONIC RENAL FAILURE

**Ashraf A. Zaher MD, Ahmed F. Donia MD*
Ehab M. Said MD, Mohammed S. Shehab El-din MD
and Ann A. Abd-Elkader MD****

Department of Neurology, Mansoura University hospital, Egypt

*Department of *Nephrology, Urology and Nephrology Center, Mansoura University, Egypt*

*Department of Neurophysiology**, Cairo University, Egypt*

Abstract

Chronic renal insufficiency is associated with neurological derangements that involve both central and peripheral nervous systems. Subclinical involvement of the nervous system in uremic adults has been detected by certain neurophysiological techniques. The electrical monitoring of the central nervous system has allowed the early detection of uremic neural injury and the evaluation of various treatments employed. Similar studies concerning Egyptian patients are lacking. Therefore, the aim of the present study was to assess subclinical involvement of the central nervous system in Egyptian patients with different degrees of chronic renal dysfunction.

A prospective controlled study was carried out. The study included a patient group and a control group. The patient group consisted of 45 chronic renal failure patients (age ranged from 18 to 67 years). The patient group was primarily designed to include 3 equal groups according to the degree of chronic renal failure. The control group included 15 healthy volunteers. Both patient and control groups were subjected to a clinical, laboratory and electrophysiological assessment. Cognitive function was assessed using the bedside Mini-Mental State Examination (MMSE). Electrophysiological assessment included Visual Evoked Potentials (VEPs), Brainstem Auditory Evoked Potentials (BAEPs) and Event-related Potentials (P300).

The whole patient group as well as the three patient groups were com-

parable to the control group regarding age and sex. MMSE score and P300 amplitude were significantly lower while P300 latency and reaction time were significantly higher in the whole patient group compared to the control group ($p=0.03$, <0.001 , 0.001 and 0.018 respectively). Various parameters of VEPs and PAEPs were significantly affected in the whole patient group. Furthermore, significant differences were noted among the three patient groups. A significant positive correlation was found between each of serum creatinine, potassium, calcium and phosphorus and each of VEPs and PAEPs.

In conclusion, MMSE, P300, VEPs and PAEPs are simple, non-invasive and reliable tools for detection of subclinical involvement of central nervous system in patients with chronic renal failure. Additionally, the more severe the degree of renal impairment, the more the affected evoked potential parameters. Furthermore, some of these tools are more sensitive than others in detection of early nervous system affection

REMIFENTANIL WITH PROPOFOL OR THIOPENTAL FOR TRACHEAL INTUBATION WITHOUT MUSCLE RELAXANTS

**Essam Makrum MD, Mohamed Samy Seddik MD
and Ehab Said MD**

Department of Anesthesia Benha Faculty of Medicine, Egypt

Abstract

This study designed to evaluate the use remifentanil followed by propofol or thiopental without muscle relaxants for endotracheal intubation compared to thiopental followed by succinylcholine as a control group for obtaining clinically acceptable intubation conditions and hemodynamic changes. We studied 90 healthy children (ASA I-II), aged three to nine years presenting for elective ENT-surgery. The children were enrolled into three equal groups: Group A received remifentanil 3 μ g/kg followed by 2.5 mg/kg propofol, Group B received remifentanil 3 μ g/kg followed by 5 mg/kg thiopental, and Group C as a control group received 5mg thiopental followed by succinylcholine 1.5 mg/kg. The tracheal intubating conditions were considered excellent in 30 (100%) of children in Group C, 27 (90%) in Groups A and 24 (80%) in Group B. Mask ventilation done easily in all children and complete jaw relaxation in 93.3% of children in Group A, 86.6% in Group B and 100% in Group C (significant difference between Group B and C $P < 0.05$). All children intubated easily, and slight cord movement in 10% of children in Group A and in 20% in Group B (significant difference between Group A and C $P < 0.05$ and a highly significant difference between Group B and C $P < 0.001$). 6.66% of children in Group A and 20% in Group B developed slight coughing at intubation (a highly significant difference between Group B and C $P < 0.001$). As regard the MAP changes after induction and intubation in Group C there was significant difference ($P < 0.05$) between Group C and B and a very highly significant difference ($P < 0.0001$) between group A and C. The heart rate decreased 14 % and 2% in the remifentanil groups A and B respectively ($P < 0.05$) and remained lower than baseline throughout the study. The heart

rate increased in group C after induction and intubation and there was significant difference ($P < 0.05$) between Group C and B while the difference in heart rate was very highly significant difference ($P < 0.0001$) between group A and C. In summary, the administration of 2.5 mg/kg propofol or 5mg/kg thiopental and 3.0 μ g/kg remifentanil provided clinically acceptable conditions for tracheal intubation and stable hemodynamic in children pretreated with atropine. With this combination of drugs, the return of spontaneous ventilation was as rapid as after thiopental/succinylcholine with acceptable hemodynamic changes. This technique may be advantageous in children with normal airway anatomy undergoing elective brief surgical procedures or in cases in which neuromuscular block is contraindicated.

ROLE OF PERCUTANEOUS RADIOLOGICAL INTERVENTION FOR TREATMENT OF DYSFUNCTIONAL HEMODIALYSIS VASCULAR ACCESS

Atef A. Salem MD

*Departments of Surgery, Benha, faculty of Medicine,
Benha University, Egypt*

Abstract

Background: *Early detection and percutaneous treatment of stenosis and thrombosis of hemodialysis access either native fistula (AVF) or graft can prolong the use of these shunts.*

Purpose: *The study is designed to investigate the role of interventional radiological procedures in treatment of failed hemodialysis access.*

Methods: *Between year 2003 and 2006, 19 patients with upper limb shunts were subjected for multiple diagnostic angiographic procedures for their failing hemodialysis access. Detection of thrombosis or stenosis was followed by interval complex treatment. For all patients; 11 thrombolytic therapies, 29 dilations and 5 stent placements were done. These were performed in 13 native fistulas (9 forearms, 4 upper arm) and 6 prosthetic grafts. Restenosis and rethrombosis were treated by consecutive redilation and further declotting.*

Results: *The dysfunction was related to the venous side of hemodialysis access in 90% of patients while it was on the arterial side in only 10%. The initial interventional success rate was 88% in the forearm, 100% in upper arm and 83% in grafts. The complications were mild and transient including 4 hematomas at puncture sites, 4 consequent access infection and 2 arrhythmic episodes; all were managed conservatively. The mean primary patency rates at 1 year period were ranging from 62.5% to 25% (62.5% for forearm AVFs, 25% for upper arm AVFs, and 40% for grafts) ($P < 0.05$). The secondary patency rates at 1 year were ranging from 88% to 75% (88% for forearm AVFs, 75% for upper arm AVFs*

and 80% for grafts). Mean period necessary for reintervention was 14 months in the forearm, 5 months in the upper arm and 6.5 months in grafts ($P < 0.05$). All patients are maintained on Aspirin and Coumarin.

Conclusion: The percutaneous treatment of stenosis and thrombosis in hemodialysis access was effective in 90% of cases and yielded a mean 40% primary and 80% secondary patency rates at one year period. The overall results were more encouraging in native forearm AVFs compared to upper arm AVFs and grafts where maintenance of the two latters need more interventions.

SERUM LEPTIN CONCENTRATIONS IN PATIENTS WITH LIVER CIRRHOSIS DUE TO HEPATITIS C INFECTION AND ITS CORRELATION WITH SOLUBLE TUMOR NECROSIS FACTOR RECEPTOR I LEVELS

Eman R. Abd El-Gawad MD, Deena Elshabrawy MD, Adel M, Agha MD, Magda Abdel Aziz MD and Tawheed mewafy MD*

*Departments of Clinical and Chemical Pathology; *Internal Medicine, Benha Faculty of Medicine, Benha University, Egypt*

Abstract

The aim of this work is to study the serum levels of leptin and sTNF-RI and study the correlation between these two factors in patients with liver cirrhosis due to HCV. The present study was performed on 80 individuals; 60 patients with liver cirrhosis due to HCV infection and 20 normal age and sex matched subjects as a control group. Serum leptin and sTNF-RI levels were measured by ELISA. The results showed significantly elevated serum leptin , (the mean value \pm SD 8.8 ± 4.0 ng/mL vs 4.4 ± 2.69 ng/ml, $p < 0.001$), and serum sTNF-RI (mean \pm SD 6.2 ± 2.3 ng/ml vs 2.25 ± 0.39 ng/ml, $p < 0.001$) in cirrhotic patients versus controls. There was positive significant correlation between serum leptin and serum total bilirubin ($p < 0.05$) and negative significant correlation with serum albumin, and total protein ($p < 0.01$). There was positive significant correlation between serum sTNF-RI and serum total bilirubin, direct bilirubin, AST and ALP ($p < 0.05$) and negative significant correlation with serum albumin, total protein, A /G ratio ($p < 0.01$) and BMI ($p < 0.05$). There was positive significant correlation between serum sTNF-RI and serum leptin ($r = 0.62$, $P = 0.001$). In conclusion, in patients with liver cirrhosis, there is increase in the serum level of leptin due to increased levels of some cytokines as sTNF-RI, the increase in serum leptin leads to loss of appetite, and malnutrition.

**PREOPERATIVE CONCURRENT
CHEMORADIOTHERAPY IN LOCALLY
ADVANCED RECTAL CANCER USING AN
OXALIPLATIN-CONTAINING REGIMEN :
A PHASE II STUDY.**

**Amal Halim MD, Ashraf Khater MD*,
Tamer Youssef MD*, Hosam Ghazy**,
Amira Elhawary MD*** and Ali El-Attar MD*****

*Departments of Clinical Oncology & Nuclear Medicine, Surgical Oncology**

*General Surgery** and Pathology ***, Faculty of Medicine,*

Mansoura University, Egypt

Abstract

Purpose: *The combination of radiation, 5-fluorouracil and oxaliplatin in locally advanced rectal cancer has been shown to be feasible in phase I trials. The purpose of this phase II trial was to assess tolerance and efficacy of this regimen in a preoperative setting.*

Patients and Methods: *Between December 2003 and Jan 2006, 46 patients with locally advanced rectal adenocarcinoma entered the study. Radiotherapy was delivered with a four-field technique to a dose of 50.4 Gy over 5 weeks with a concomitant boost approach. Two cycles of chemotherapy were given synchronously on weeks 1 and 5 (from days 1-5 & 29-33) in the form of oxaliplatin 130 mg/m² on day 1 plus 30 minute infusion of 100mg/m² L-folinic acid and continuous infusion of fluorouracil 350 mg/m² for 5 days. Surgery was planned 6 weeks later.*

Results: *All patient completed treatment without modification except 10/46 patients (21.7%) who experienced grade 3/4 toxicity which necessitates treatment interruption and further dose reduction. Surgery was performed in 44 patients as 2 cases developed metastasis before the time of the planned surgery. An objective response was seen in 31 patients (67.4%). Sphincter-saving surgery was possible in 27 patients (61.4%). No postoperative deaths occurred.*

In 5/44 patients (11.4%), the operative specimen was sterilized and in 2/44 patients (4.5%), only very few residual malignant cells difficult to find microscopically were detected. Pathological downstaging was diagnosed in 70.5% (31 out of 44 patients).

Local and distant progression occurred later in 9 patients and the 2-year event-free and overall survival were 83% and 91% at a median follow up time of 20 months. The median event-free and overall survival durations were 12 and 22.5 months respectively. The event-free duration ranged from 5 to 34 months while the overall survival duration ranged from 13 to 36 months.

Conclusion: *Such a combined preoperative chemoradiotherapy using an oxaliplatin-containing regimen is well tolerated with no increase in surgical morbidity. The rates of pathological downstaging and sphincter-saving surgery are encouraging. Further phase III studies are needed for better evaluation of the value of such regimen.*

SERUM PROLACTIN CONCENTRATIONS IN FEMALE PATIENTS WITH SYSTEMIC LUPUS ERYTHMATOSUS

**Abd El-Hameed A. Metwally MD,
Ehab E. El-Toraby MD*, Enaas A. Mohamed MD,
Sherif R. El-Basyouni MD* and Doaa A. Shaheen MD****

Departments of Internal Medicine, Rheumatology and Rehabilitation,
Clinical Pathology**, Mansoura University, Egypt.*

Abstract

Elevated serum PRL levels have been reported in SLE patients and its role in the pathogenesis of SLE is controversial. To assess the frequency of hyperprolactinemia in patients with SLE and evaluate its possible clinical significance with the disease activity. The basal level of PRL is determined in a 23 female patients with SLE by radioimmunometric assay. For every patient the Systemic lupus disease activity was assessed using the Systemic Lupus Erythmatosus Disease Activity Index (SLEDAI). CBC, liver functions, serum creatinine, urine analysis, ESR, ANA, anti- ds DNA, C3, and C4 were determined by standard techniques. Any patients who had other conditions known to be associated with hyperprolactinemia were excluded. Correlations between PRL concentrations and SLE clinical and serological activity were evaluated. The mean age of the studied population was 28.9 ± 7 SD years (range 19-46), and the mean duration was 3.3 ± 3.6 SD years (range from 0 or new case to 11 years). Elevated serum concentrations of PRL > 20 ng/ml were found 10/23 (43%) of patients with SLE, (range= 8-55 ng/ml, mean was 27.1 ± 16.1 SD). A significant correlation was found between high PRL level and clinical disease activity evaluated by SLEDAI ($r= 0.7$, $P < 0.001$). Also there were significant correlations between ANA, Anti-dsDNA antibody, C3 and serum PRL levels ($r= 0.6$, 0.7 , and -0.56 , $P= 0.001$, <0.001 , and 0.005 respectively). There were significant difference between mean of prolactin levels in patients with lupus nephritis, proteinuria, oral ulcer, and lupus arthritis ($P=$

Abd El-Hameed A. Metwally, et al...

0.023, 0.049, 0.05 and 0.03 respectively) . In conclusion: we found that hyperprolactinemia detected by IRMA was associated with disease activity in SLE.

Key words: Prolactin, Systemic lupus erythmatusus, Disease activity

Corresponding author: Metwally AA, Lecturer of internal medicine, Diabetes and endocrinology unit, Mansoura University, Egypt.

SHOULD RUBBER BAND LIGATION BE THE FIRST LINE OF TREATMENT OF HEMORRHOIDS IN OUTPATIENT SETTINGS?

Hesham Abdul Moneim MD

*Department of Colo-Rectal Surgery Unit, Mansoura University Hospital
Mansoura Faculty of Medicine, Egypt*

Abstract

Purpose: This prospective study was undertaken to evaluate the suction rubber banding as a simple outpatient procedure in treatment of patients with grade I, II and III hemorrhoids regarding its efficacy, complications, patient satisfaction as well as its long term outcome. **Patients and methods:** From January 2000 to December 2005, 181 patients with 1st, 2nd, & 3rd degree hemorrhoids were treated in our Colorectal Surgery Unit, Mansoura University Hospital. They were 91 males and 90 females. Their mean age was 37.72 ± 13.89 years. All patients were treated by rubber band ligation without anesthesia in the outpatient clinic. Three bands maximum were applied per session to be repeated 2 months later if necessary. Patients were followed up after 1, 2 weeks and then monthly for a mean period of 14.71 ± 5.23 months. Patients were considered satisfied when symptoms disappeared completely, otherwise were considered unsatisfied. **Results:** the main symptoms were bleeding in 153 patients (84.53%), protruding mass in 85 patients (46.96%), and other related symptoms in 14 patients (7.73%). First-, second- and third-degree piles were found in 32 patients (17.68%), 81 patients (44.75%) and 68 patients (37.57%) respectively. The mean number of hemorrhoids ligated per session was 2.58 ± 0.49 . Early morbidity had occurred in the form of vasovagal attacks in 34 patients (18.78%), bleeding in two patients (1.10%), retention of urine in 9 patients (4.97%) and local infection and abscess formation in one patient (0.55%). Post banding pain was well tolerated in almost all of our patients with an insignificant difference between patients whether one, two or three hemorrhoids were ligated per session (P 0.238).

*Satisfactory results were noticed in 132 patients (72.93%), 18 patients (9.94%) and 4 patients (2.21%) after one, two, and three sessions respectively with an overall satisfactory results in 154/181 (85.08%). On the other hand, 27 patients (14.92%) were shifted to open hemorrhoidectomy due to recurrence of symptoms and for being unsatisfied in banding. **Conclusion:** rubber band ligation seems to be a simple, easy, effective and convenient modality in treating first-, second- and third- degree hemorrhoids as an outpatient procedure with a good long term outcome.*

**AVAILABILITY AND IMPACT OF GREAT
AURICULAR NERVE PRESERVATION
DURING SUPERFICIAL PAROTIDECTOMY
ON AURICULAR SENSATION AND
PATIENTS' QUALITY OF LIFE**

Akram M. Al-Gendy MD & Mohamed Saad MD*

Department of Otorhinolaryngology & General Surgery,
Faculty of Medicine, Benha University & Health Authority Hospitals, KSA**

Abstract

The present study aimed to evaluate the feasibility and impact of great auricular nerve (GAN) preservation after superficial parotidectomy on its functional outcome; namely auricular sensation and patients' quality of life (QOL). The study included 17 patients; 12 males and 5 females with mean age of 51.2 ± 11.4 ; range: 30-62 years. All patients presented by unilateral swelling in the parotid region and underwent superficial parotidectomy with preservation of GAN. Postoperative touch sensation of the pinna and QOL after parotidectomy were evaluated and represented on 100-point visual analogue scale (VAS) at 2-weeks, 1, 2, 3 and 6-months after surgery. All surgeries were completed with no intraoperative complications. Posterior branches of GAN could be preserved in 12 cases (70.6%) while the nerve was thin and could not be preserved in 2 cases and was adherent and could be dissected in another 3 cases, thus GAN was excised in 5 cases (29.4%). Touch sensation of the pinna showed progressive time-course improvement in all patients whether the GAN was preserved or excised and the mean sensation VAS score showed a significant ($P < 0.05$) increase at each time of examination compared to the previous records irrespective of nerve preservation or excision with significantly higher ($P < 0.05$) in patients with preserved GAN compared to those with excised GAN. Also, mean QOL scores showed progressive time-course improvement in all patients with significantly ($P < 0.05$) higher QOL scores in patients with preserved GAN compared to those with excised

GAN. It could be concluded that preservation of posterior branch of GAN is feasible and improves the outcome of parotidectomy with significant preservation of sensation of pinna and improved quality of life.

LAPAROSCOPIC URETEROLITHOTOMY: IS IT AN ALTERNATIVE TECHNIQUE REPLACING OPEN SURGERY

**Ahmed Abou Taleb MD, Mohamed Abdel Zaher MD,
Khaled El-Gamal MD, Mostafa Mahmoud MD,
Rabea Gomaa, Mohamed El-Azab MD
and Ahmed Abdel Baky MD**

Department of Urology, Benha University, Egypt

Abstract

Objective: *To assess and evaluate the technique as a replacement to open surgical uretero-lithotomy.*

Patients and Methods: *Fifteen patients with failed either ESWL or endoscopy and large calculi at the upper ureter were included in this study for performing transperitoneal laparoscopic uneterolithotomy . Mean age was 47.27 ± 9.32 SD, 9 patients had right sided stones and 6 were left sided. Stone size range was 10-20 mm with mean 14.67 ± 2.89 SD. 14 cases the stones were in the lumbar region and only 1 case at the iliac region.*

Results: *Successful laparoscopic stone removal were in 13 out of 15 (86.6%). Two operative conversion to open surgery due to migration of stone in one case and in other conversion is due to injury of left common iliac artery. Operative times was 119.3 ± 38.03 SD minutes (60-180min) estimated blood loss 62.3 ± 11.6 (30-100) cc., mean drain removal time was 3.4 days, mean post operative parenteral analgesia was 150 mg of diclofenac sodium (75-300mg), mean hospital stay was 4.3 (3-8days) and mean resuming normal activity was 11.6 (8-21 days).*

Conclusion: *Laparoscopic ureterolithotomy is a safe technique with a shorter hospital stay and rapid return to normal activity and offers an alternative modality than open surgery after treatment failure (ESWL, endoscopy) or for large size calculi. Open surgery has a role for managing laparoscopic converted cases.*