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# **BENHA MEDICAL JOURNAL**

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## **EFFECT OF HYDRATION ON GERIATRIC PATIENTS SUBMITTED TO ORTHOPEDIC SURGERY**

**Tarek M. A. Shams MD, Mohamed A. A. Sultan MD,  
Mona A. Hashish MD, Samah A. Goda MSc.**

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

### **Abstract**

*Background:*The aim of this present study was to evaluate the effect of perioperative hydration on morbidity and mortality among geriatric patients submitted to orthopedic operations.

*Methods:* The study was carried out on geriatric patients subjected to orthopedic surgery in Mansoura University Emergency Hospital. It included two groups: a retrospective group and a prospective one. The retrospective group patients were considered as the control group. It included 310 patients who represent geriatric patients subjected to orthopedic surgery at Mansoura University Emergency Hospital during the last three years. Patients' data obtained from the file records were collected. The Prospective group included 100 patients representing geriatric surgical orthopedic patients in the last six months. At the time of admission to the orthopedic department, they were clinically examined, laboratory investigations were done and received i.v. fluids till the time of the operation. Postoperatively and for three days, they were subjected to fluid regimen in the form of 500 ml of Ringer's lactate every 12 hours and 500 ml of 5% glucose every 12 hours during the first day. During the second day, 500 ml of Ringer's lactate every 12 hours and 500 ml of 5% glucose every 24 hours. In the third day, they received 500 ml of Ringer's lactate every 24 hours and 500 ml of 5% glucose every 24 hours. They were followed clinically by heart rate, arterial blood pressure and amount of urine output every 6 hours and laboratory by serum creatinine and arterial blood gases after 72 hours. Morbidity and mortality among this group were record-

*ed and, together with the data as those of retrospective group patients, compared statistically to the retrospective group.*

*Results: our study showed no statistically significant difference between the two groups as regards hospital stay and morbidity while mortality in prospective group showed zero incidence compared to (5.8%) incidence in retrospective group patients. Prospective group patients postoperative heart rate were, although within normal, significantly decreased when compared to the basal while their mean arterial blood pressure showed no statistically significant change a part from at the sixth and twelfth hours where significant reduction was noticed. Seventy-two hours postoperative serum creatinine in Prospective group patients was significantly reduced compared to the basal value while serum electrolytes showed no statistically significant change. Seventy-two hours postoperative ABG in Prospective group patients showed no statistically significant change in PaCO<sub>2</sub>, PH and HCO<sub>3</sub> levels while PaO<sub>2</sub> and SaO<sub>2</sub> were significantly increased when compared to the basal value.*

*Conclusion: From our study we concluded that perioperative hydration of geriatric orthopedic patients reduces mortality among those patients.*

**DETECTION OF SPECIFIC SECRETORY IGA IN  
SALIVA AND STOOL OF PATIENTS FOR  
DIAGNOSIS OF SCHISTOSOMA  
MANSONI INFECTION**

**Mohamed S. Noureldin MD, Hassan A. El-Shinnawy MD,  
Manar S. Azab MD, Mohamed A. El-Malky MD,  
Hassan S. El-Nagggar MD, Ayman T. Abbas MD\*\*  
and Mohamed E. Youssef MD**

*Departments of Parasitology & Hospital\*; Gastroentrology Center\*\*;  
Mansoura Faculty of Medicine, Mansoura University, Mansoura, Egypt.*

**Abstract**

*A total of thirty enzyme-linked immunosorbent (ELISA) assays detecting serum and secretory immunoglobulins against Schistosoma mansoni cercarial antigen preparation (CAP), soluble egg antigen (SEA), and adult worm antigen (AWA) were evaluated for diagnosis of Schistosoma mansoni infections. For each antigen, serum IgM, IgG, IgA, IgE, IgG1, IgG2 and IgG4 and secretory IgA in unstimulated saliva, stimulated saliva and stool were quantitatively determined in samples from 116 Schistosoma mansoni infected subjects and 50 normal controls. Cut off values and evaluation parameters were calculated from receiver operating characteristic (ROC) curve. With serum samples, CAP-IgG, CAP-IgG1, SEA-IgG, SEA-IgG1, AWA-IgG1 and AWA-IgG4 were the best assays showing sensitivities of 94.8, 91.4, 95.7, 94.8, 91.4, and 94.8%, respectively, and specificities of 100, 92, 96, 100, 92, and 100%, respectively. With secretory IgA, stimulated saliva SEA and AWA-IgA, and stool SEA-IgA showed the best results with sensitivities of 85.4, 93.1, and 89.7%, respectively, and specificities of 100, 92, and 96%, respectively. In conclusion, different antibody classes determined showed high sensitivities and specificities in diagnosis of active schistosomiasis. Secretory IgA against Schistosoma mansoni antigens showed promising sensitivities and specificities, which make it a helpful tool in diagnosis of active schistosomiasis in the*

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*future, as it is an easy non invasive technique, which may help in epidemiological studies.*

## **THE EFFECTS OF COBLATION TECHNOLOGY ON THE SOFT PALATE OF RABBITS. AN EXPERIMENTAL STUDY**

**Azab Ahmed MD, Yasser Haroon MD, Ismail El-Mofty MD,  
Mohsen Abd Elrazek MD and Manal Salman MD\***

*Departments of ENT, Benha Faculty of Medicine, Benha University.*

*Departments of Pathology , Ain-Shams University \*, Egypt.*

### **Abstract**

*This study was designed to evaluate the volumetric reduction and the histologic changes of the soft palate after coblation (cold ablation) technology in experimental animals. Sixty male rabbits were included in the study divided into 3 groups : group (A), group(B) and group(C). Each group included 10 control and 10 study animals. Exposure of the soft palate to coblation was done in study animals of the 3 groups submucosally at 3 sites, one at midportion and 2 at lateral sides of the soft palate for one minute duration in each site. The control animals of the 3 groups were left without any interference. The animals of group A, B and C were studied 1 month, 2 months and 3 months respectively. The soft palate of each rabbit was dissected and volume was calculated. Specimens of soft palate of both control and study animals were examined by electron microscopic study. Died animals were excluded from this study. The comparison of the mean volume of soft palate in the study groups showed gradual increased reduction with time as it was more after 3 months (group C) than 2 months (group B) and 1 month (group A). This result was confirmed by electron microscopic study as there was an increase in the amount of collagen fibers in the subepithelial layer gradually in study groups which was mild, moderate and marked in group A, B and C respectively. Cytoplasmic vacuoles were detected more in the epithelial layer of study group (A) than group (B) this means degenerative changes which is reversible as it was decreased by time and disappeared in group (C). There is no effect on the mucosal glands of the epithelium or*

*underlying muscles. The only histological difference between study and control groups was the increased amount of collagen fibers in the subepithelial layer.*

*Coblation technology could be considered an effective technology for the reduction of the size of soft palate. It is safe , not painful and not invasive as it maintain the normal histology of the soft palate.*

## **THE EFFECTS OF TIP-BINDING SUTURES AND CARTILAGINOUS GRAFTS ON NASAL TIP PROJECTION AND ROTATION**

**Sobhy Abou El-Fotouh MD**

*Department of Otolaryngology, Benha Faculty of medicine, Egypt*

### **Abstract**

*Although many techniques have been described to achieve a desired result in tip surgery, there are few studies that define or analyze the changes that occur after surgery. This study was made to document changes in nasal tip projection, crural and lobular lengths of the columella, columellar length, and proportional relationships of tip projection and columella with dorsal length.*

*This study was conducted on 20 patients who underwent primary rhinoplasty. Patients were classified into 2 groups, (group 1, the tip-binding suture group) and group 2 (the cartilaginous graft group). Analysis was based on data collected from preoperative and 1-year postoperative lateral views of patients. The measurements were obtained using the parameters regarding tip projection and rotation on standardized photographs. The values were statistically analyzed with paired and unpaired t tests.*

*The changes in all parameters except crural length were statistically significant in the tip-binding suture group. In contrast, the statistical analysis of the cartilaginous graft group revealed prominent dimensional changes in tip projection and especially in crural and lobular segments.*

*It is recommended that the cartilaginous grafts should be considered if the dimensional changes have priority in the preoperative plan. The columellar strut graft provides satisfactory structural tip support and dimensional changes in crural length. Shield grafting causes augmentation in the lobular segment. If minor dimensional changes with more rotational alterations are planned, tip suture techniques should be preferred.*

## **BILATERAL SUPERFICIAL CERVICAL PLEXUS BLOCK AS A PRE-EMPTIVE ANALGESIA FOR THYROID SURGERY**

**Ahmed A. El-Ashry MD, Medhat M. El-Hantery MD  
and Yasser M. S. Eita MD**

*Department of Anesthesiology and Intensive Care  
Damietta Faculty of Medicine, Al - Azhar University, Egypt*

### **Abstract**

*Opioids are reliable analgesics, but not devoid of deleterious side effects. The aim of this study was to assess the efficacy of bilateral superficial cervical plexus block as a pre-emptive analgesic technique for postoperative pain relief after thyroid surgeries. Method: 60 ASA I, II patients scheduled for thyroid surgery have been enrolled after informed consent. They were randomised in two groups. Both groups received general anesthesia (GA). Groups I received bilateral SCPB; before induction of GA; with 30 ml bupivacaine 0.25%, while group II receive no block. Physical and haemodynamic parameters were recorded during and after the procedure. Analgesic consumption, VAS, nausea and vomiting ;( PONV) were recorded during postoperative periods. Results: The two groups were similar according physical parameters. Postoperative analgesics consumption and VAS was significantly lower in- group I than in-group II. CONCLUSION: Bilateral SCPB is an easy, safe and effective pre - emptive analgesic technique for thyroid surgery. It provides more stable hemodynamic in operative and postoperative period, better Aldrete recovery score, reduces opioid consumption, and lowers the incidence of PONV.*

**TRANSFER OF SERUM SUPPRESSIVE  
ACTIVITY, WHICH INHIBIT LYMPHOCYTE  
PROLIFERATIVE RESPONSE TO SCHISTOSOMA  
MANSONI ANTIGENS, FROM SCHISTOSOMA  
MANSONI INFECTED MOTHERS  
TO THEIR OFFSPRING**

**Mohamed S. Noureldin Ph.D, Hassan A. El-Shinnawy MD\*,  
Medhat A. El-Daker Ph.D\*\*, Mohamed E. Ghanem MD\*\*\*,  
Abdel-Gawad A. Sheisha MD\*\*\*\* and Mohamed A. Sobh MD\*\*\*\*\***

*Departments of Parasitology; National Liver Institute, Meneufiwa University\*,*

*Microbiology and Immunology\*\*, Gynecology and Obstetrics\*\*\*;*

*Pediatric\*\*\* and Urology and nephrology Center\*\*\*\*;*

*Mansoura Faculty of Medicine, Mansoura University, Mansoura, Egypt*

**Abstract**

*The study objective was to find if serum specific suppressive activities on lymphocyte transformation in response to Schistosoma mansoni (S. mansoni) antigens, usually present in serum of chronic S. mansoni infected patients, are permeable through the placenta from S. mansoni infected mothers to their newborns. Also, to find if such transferred activities are maintained during breast feeding and after weaning. Control group of 8 normal mothers and their offspring and 3 study groups of 13, 11, 11 S. mansoni infected mothers and their newborns, breast-fed infants and weaned children were included in the study. Proliferative response of lymphocytes, from S. mansoni donors, to S. mansoni soluble egg antigen (SEA) and adult worm antigen (AWA), in presence of serum from each infected mothers groups, showed significantly higher suppressive activity than when the same lymphocytes were incubated with the same antigens in presence of serum from normal mothers group. This suppressive activity was transferred from S. mansoni infected mothers to their newborns' serum and maintained in their breast-fed infants' serum as donors' lymphocytes showed significantly higher suppressive activity in presence of serum from these two groups than in presence of serum from offspring of*

*normal mothers. Serum from weaned children of S. mansoni infected mothers still showed suppressive activity significantly higher than serum from offspring of normal mothers but significantly lower than suppressive activity of serum from newborns and breast-fed infants of S. mansoni infected mothers. No significant difference in suppressive activity in presence of serum from different groups when donors' lymphocytes were stimulated by PHA indicating that this transferred suppressive activity is specific to S. mansoni antigens. Interleukin-10 (IL-10) production by donors' lymphocytes when stimulated by different stimulants showed results parallel to suppressive activity. Also, IL-10 production by donors' lymphocytes when stimulated by SEA and AWA in presence of serum from offspring of S. mansoni infected mothers showed highly significant positive correlation with suppressive activity of donors' lymphocytes when stimulated by the same antigens in presence of the same serum ( $P = 0.001$  and  $< 0.001$  respectively). The parallelism and correlation between effect of serum on suppressive activity and IL-10 production suggest that IL-10 production is one of the main mechanisms by which serum affect lymphocytes transformation. These results suggest that the anti-schistosomal immunological status of S. mansoni infected mothers affects the future of their offspring when infected with S. mansoni and encourage studying the use of effective pathology modulating vaccines with mothers during pregnancy and lactation.*

## **EARLY USE OF NASAL PRONG CONTINUOUS POSITIVE AIRWAY PRESSURE IN VERY LOW BIRTH WEIGHT INFANTS; EFFICACY AND OUTCOME**

**Mohamad O. El-Sayid MD, Abdel Hafez M. Ramadan MD  
and Khalid S. A. Alkelany MD**

*Department of Pediatric, Shebin Al-koom Teaching Hospital, Egypt*

### **Abbreviations**

*CLD, chronic lung disease; VLBWI, very low birth weight infants; CPAP, continuous positive airway pressure; NP-CPAP, nasal prong continuous positive airway pressure; NICU, neonatal intensive care unit ; IMV, intermittent mandatory ventilation; NEC, necrotizing enterocolitis; IVH, intraventricular haemorrhage .*

### **Abstract**

*To study the impact of early use of NP-CPAP as a respiratory supportive measure among VLBWI, the outcome in two groups of preterm infants with a birth weight of 1000-1499 gm were compared retrospectively over two and half year period before (period I n=51) and after (period II n=60) the introduction of a primarily NP-CPAP based approach as a respiratory support .*

*It was noticed that number of VLBWI needed IMV was less in group II (8/60 versus 30/51,  $p < 0.0001$ ). Number of cases developed postnatal sepsis was higher among group I (18/51 versus 9/60,  $p < 0.05$ ). Number of survivors among group II was more than among group I (54/60 versus 36/51,  $p < 0.05$ ). Length of stay in NICU was more among group I (42+/-5.3 days versus 36+/-6.7 days,  $p < 0.001$ ). Cases received early NP-CPAP showed fewer incidences of complications as air leaks, NEC, IVH and hydrocephalus but the difference was statistically insignificant.*

*So, we concluded that early use of NP-CPAP among VLBWI improves survival, decreases length of stay in NICU, decreases incidence of postnatal sepsis and decreases the need for IMV.*

**SERUM SOLUBLE INTRACELLULAR ADHESION MOLECULES-1 (sICAM-1) AND AST/ALT RATIO IN CHRONIC HEPATITIS C ARE SIGNIFICANT PREDICTORS OF THE DISEASE SEVERITY JUDGED BY LIVER BIOPSY**

**Hossam Amin MD, Magdy A. Gad MD, Yasser M. Ismail MD\*,  
Eman Ramadan MD\*, Mohamed Darwish\*\*  
and Ragaee Ramzi MD\*\*\***

*Departments of Hepatology, Gastroenterology & Infectious Diseases,  
Clinical Pathology\*, Internal Medicine\*\* & Pathology\*\*\*-  
Benha Faculty of Medicine- Zagazig University, Egypt*

**Abstract**

*This study was conducted to investigate the serum levels of soluble Fas (sFas) antigen, soluble intracellular adhesion molecules-1 (sICAM-1) and interleukin-18 (IL-18) in patients with chronic hepatitis C and to correlate their levels with the severity of pathological findings judged by liver biopsy interpreted as Scheuer score. The study included 30 patients with chronic hepatitis C (Study group) infection persisting for longer than 6 months with HCV antibody positive and increased serum alanine aminotransferase (ALT) values and 10 volunteers to donate blood samples as control group. After complete history taking and full clinical examination, all patients and controls gave a fasting blood sample for colorimetric estimation of serum aspartate transaminase (AST), ALT and total (TB) and direct (DB) bilirubin and for ELISA assays of serum sICAM-1, sFas and IL-18 levels. Blind liver biopsies were done and histopathological inflammatory activity (grading, 0-4 scale) and fibrosis stage (0-4 scale) were assessed according to Scheuer classification. Pathological examination of liver biopsy detected 21 chronic hepatitis specimens and 9 cirrhosis specimens with a significant ( $p < 0.05$ ) increase of Scheuer scores in patients with cirrhosis compared to patients with chronic hepatitis. Serum levels of AST and ALT were significantly ( $p < 0.05$ ) elevated in study compared to control group, with a non-significant ( $p > 0.05$ ) increase of AST/ALT ratio; however, serum AST levels and AST/ALT ratio were significantly ( $p < 0.05$ )*

*higher and serum ALT levels were non-significantly ( $p>0.05$ ) higher in cirrhotic patients compared to those with chronic hepatitis. Serum sFas, sICAM-1 and IL-18 levels in study group were significantly ( $p<0.05$ ) higher compared to controls levels with a significant ( $p<0.05$ ) increase of sICAM-1 levels and non-significant ( $p>0.05$ ) increase of sFas and IL-18 levels in cirrhotic patients compared to patients with chronic hepatitis. There was a positive significant correlation between the mean Scheuer necro-inflammatory score and serum levels of ALT, sICAM-1 and AST/ALT ratio and between the mean Scheuer fibrosis score and serum levels of ALT, sFas, sICAM-1 and IL-18 and AST/ALT ratio. Logistic regression analysis showed that AST/ALT ratio ( $\beta=0.679$ ,  $p<0.001$ ) and serum levels of sICAM-1, ( $\beta=0.327$ ,  $p=0.005$ ) are the most significant predictors of disease severity. It could be concluded that serum levels of sICAM-1, sFas and IL-18 and AST/ALT ratio are closely correlated with histopathological results of liver biopsy and thus their elevated levels could be considered pathognomonic markers suggesting the severity of chronic hepatitis C.*

**PREDICTION OF THE OUTCOME OF  
LAPAROSCOPIC OVARIAN DRILLING FOR  
POLYCYSTIC OVARIAN SYNDROME IN WOMEN  
WITH ANOVULATORY INFERTILITY**

**Ashraf Ghanem MD, Moharram Abdel Hasseib MD\*,  
Abdel Gawad El-Metwally MD, Mohsen Khairy MD\*,  
Hosam Ghanem MD\*\* and M. Arman MD\*\***

*Departments of Obstetrics and Gynecology and \*\*Clinical Pathology,*

*MANSOURA Faculty of Medicine. Department of \*Obstetrics*

*and Gynecology, Benha Faculty of Medicine, Egypt*

**Abstract**

*Background: Laparoscopic ovarian drilling (LOD) has been commonly used for the treatment of clomiphene citrate (CC)-resistant women with polycystic ovarian syndrome (PCOS). However, about 20-30% of anovulatory women with PCOS fail to respond to LOD. So, identifying factors that can predict the outcome of this modality of treatment may help the clinician for proper selection and counseling of those women about their chances for the success of LOD.*

*Objective: The aim of this study is to determine the clinical, endocrinologic, biochemical and ultrasonographic factors that can predict the success of treatment following LOD in CC-resistant women with PCOS.*

*Design: A prospective designed study.*

*Setting: Departments of Obstetrics and Gynecology, Mansoura and Benha University Hospitals.*

*Patients and Methods: Sixty-seven CC-resistant PCOS patients were included in the study. Preoperative evaluation of the known clinical, endocrinologic, biochemical and ultrasonographic factors associated with PCOS were done initially. Then, all patients included in the study underwent LOD using the triple-puncture technique. Post-operatively, all women were followed-up for the occurrence of either ovulation or pregnancy. Those with persistent anovulation after LOD were offered CC. The effect of the different pre-operative characteristics on the ovulation and pregnancy rates after LOD was assessed. Moreover, women were divided into two*

or three categories according to the severity of each of the known factors associated with PCOS. The success rates were compared between the categories of each factor. Multiple logistic regression analysis was used to identify independent predictors of success of LOD.

*Main outcome measure: Ovulation and pregnancy rates.*

*Results: Of the 67 women, 36 (53.7%) ovulated spontaneously and a further 14 women ovulated after the addition of CC, giving an overall ovulation rate of 74.6%(50 out of 67). From those ovulated spontaneously (36),26 (38.8%) conceived spontaneously, and the overall pregnancy rate after the help of CC was 49.2%(33 out of 67). Women with duration of infertility > 6 years, marked obesity (BMI  $\geq$  35 Kg/m<sup>2</sup>), marked hyperandrogenism (serum testosterone  $\geq$  1.8 ng/dL), and insulin resistance (serum fasting insulin  $\geq$  20 uU/mL, and/or a fasting glucose insulin ratio  $\leq$  4.5) showed poor response to LOD. The duration of infertility and serum testosterone level appeared to be the most important two significant predictors affecting the outcome after LOD. Increasing pre-treatment levels of LH (> 10 IU/L) did not reach statistical significance to affect the outcome, but once ovulation was achieved, it appeared to be associated with higher pregnancy rate.*

*Conclusion: Longer duration of infertility, marked obesity, marked hyperandrogenism and marked insulin resistance seemed to be associated with high probability of LOD failure. On the other hand, a high pre-treatment LH level appeared to be associated with a high probability of pregnancy once ovulation is achieved.*

**THE ROLE OF SERUM VASCULAR  
ENDOTHELIAL GROWTH FACTOR IN THE  
PREDICTION OF OVARIAN HYPERSTIMULATION  
SYNDROME IN WOMEN WITH POLYCYSTIC  
OVARIAN SYNDROME**

**Moharram Abdel Hassieb MD, Ashraf Ghanem MD\* ,  
Mohamed Nezar MD\*, Mohsen Khairy MD  
and Hosam Ghanem MD\*\***

*Department of Obstetrics and Gynecology, Benha Faculty of Medicine.*

*Departments of \*Obstetrics and Gynecology and*

*\*\*Clinical Pathology, Mansoura Faculty of Medicine, Egypt*

**Abstract**

*Background: Ovarian hyperstimulation syndrome (OHSS) is an iatrogenic and potentially life-threatening complication of treatment with fertility drugs. Women with polycystic ovaries (PCO) and polycystic ovarian syndrome (PCOS) are at a particularly higher risk of developing OHSS. The traditional determinants viz. serum estradiol (E<sub>2</sub>) concentrations and the number of follicles on the day of human chorionic gonadotrophin (hCG) administration are not only increasingly recognized that they do not adequately define the risks for this syndrome but also do not accurately predict its occurrence. On the other hand, numerous reports now emphasized the role of vascular endothelial growth factor (VEGF) as an important mediator of the syndrome and that it provides a nonsteroidal index of the ovarian response to gonadotrophin stimulation.*

*Objective: The aim of this study was to examine the possible role of the circulating serum VEGF concentration pattern during ovarian stimulation as a method of predicting OHSS in women with PCOS and hence its possible real prevention.*

*Design: A prospective designed study.*

*Setting: Outpatient women's clinics, Departments of Obstetrics and Gynecology, Benha and Mansoura University Hospitals.*

*Patients and Methods: A total of ninety-six women with anovulatory infertility due to PCOS were included in the study. All women underwent*

controlled ovarian stimulation and were followed-up for the development of OHSS. Cases who developed mild OHSS (n=6) were excluded from the study, while those who developed either moderate (n=6) or severe OHSS (n=2) were only included. Consequently, the remaining studied women (n=90) were divided into two groups: an "OHSS group" (moderate/severe; n = 8) and a "non OHSS group" (n = 82). Serum was collected from all patients in the early follicular phase before the initiation of the treatment, on the days of hCG injection and 48 hours after hCG injection and was assayed for VEGF concentration.

**Results:** The serum VEGF concentration increased significantly in all the studied women during ovarian stimulation irrespective of whether OHSS developed or not. The rise was significantly higher on the day of hCG administration than in the early follicular phase at the beginning of ovarian stimulation in both groups (it increased from  $156.3 \pm 45.2$  to  $257.4 \pm 108.6$  pg/mL in women in whom OHSS developed and from  $145.4 \pm 39.8$  to  $168.2 \pm 36.5$  pg/mL in women in whom it did not) ( $P < 0.01$ ). There was a further increment in the VEGF concentration 48 hours after hCG administration in both groups (up to  $398.5 \pm 112.9$  and  $186.2 \pm 42.8$  pg/mL respectively). The levels of serum VEGF on both the day of hCG administration and 48 hours after hCG administration were significantly higher in women with OHSS than those without OHSS. A cut-off value of 240 pg/mL for serum VEGF concentration on the day of hCG administration offered a sensitivity of 76.8%, negative predictive value (NPV) of 82.2% and positive predictive value (PPV) of 73.4%. The rise in the serum VEGF concentration that occurred between the day of the beginning of cycle stimulation and the day of hCG administration (referred to as the "VEGF rise before hCG administration") and that occurred between the day of hCG administration and 48 hours after hCG administration (referred to as the "VEGF rise after hCG administration") were significantly higher in women in whom OHSS developed than in those without OHSS ( $P < 0.05$ ). Both were found to be good markers for the development of OHSS. The sensitivity, NPV and PPV for "VEGF rise after hCG administration" at a cut-off value of 100 pg/mL were 96.6%, 93.8% and 65.4% respectively in the prediction of OHSS. Similar values, although slightly lower were obtained for the "VEGF rise before hCG administration" at a cut-off value of 70 pg/mL (90.2% , 91.4% and 62.3% respectively).

*Conclusion: The "VEGF rise after hCG administration" might offer a good single marker for prediction but not real prevention of the development of OHSS in PCOS women during ovarian stimulation. Worthily "VEGF rise before hCG administration" might offer a similar good single marker for its prediction and also a real chance for its prevention at the same time both in in vitro fertilization (IVF) and non-IVF stimulated cycles. Prevention can be achieved by withholding hCG administration, canceling the cycle, lowering the dose of hCG or withholding hCG for a couple of days (coasting) and thus ultimately avoiding a life-threatening complication in such at risk group of women.*

## **SERUM LEVEL OF SOLUBLE TUMOR NECROSIS FACTOR RECEPTOR-II IN SYSTEMIC LUPUS ERYTHEMATOSUS PATIENTS**

**Abdulsalam A. Norrwali, MD, FRCPC.**

*Department of Medicine and Rheumatology, Faculty of Medicine,  
Umm Al-Qura University, Makkah, Kingdom of Saudi Arabia*

### **Abstract**

*Soluble tumor necrosis factor receptor-II (sTNFR-II) was measured in serum of systemic lupus erythematosus patients and its possible relation to disease activity was determined. This study was conducted in 25 SLE female patients. Another 15 healthy females matched for age were chosen as a control group. All patients, were subjected to clinical and laboratory assessment. Disease activity was evaluated with systemic lupus erythematosus Disease Activity Index (SLEDAI). Serum levels of sTNFR-II was measured by enzyme Linked immunosorbent assay (ELISA). Results showed that, serum level of sTNFR-II was significantly higher in patients with SLE compared with normal controls. Serum level of sTNFR-II correlated significantly with SLEDAI score.*

*So, our findings demonstrate that sTNFR-II measurement in the serum of SLE patients may be a good indicator of disease activity.*

## **SERUM LEPTIN LEVELS IN PATIENTS WITH SYSTEMIC LUPUS ERYTHEMATOSUS AND RHEUMATOID ARTHRITIS**

**Asmaa Hegazi MD, Amira F. Barakat MD,  
Abdel Ghany Nasr MD\* and Iman Morsy MD\*\***

*Department of Internal Medicine, Faculty of Medicine, Mansoura University  
& Departments of Pediatric\* & Clinical Pathology\*\*, Benha Teaching Hospital, Egypt*

### **Abstract**

*Background: Leptin is a cytokine-like peptide produced mostly by adipose tissue and regulating food intake, basal metabolism and the B-oxidation of fatty acids. It has recently been recognized as a modulator of inflammatory and immune responses, with a possible significant role in the pathogenesis of several autoimmune diseases.*

*Objective: to evaluate the serum leptin levels in patients with systemic lupus erythematosus (SLE) and rheumatoid arthritis (RA), and its relation to disease activity and systemic complications of each disease.*

*Subjects & Methods: Leptin was measured in the serum of 20 patients with SLE and 20 patients with RA and in 10 healthy control subjects of similar body mass index (BMI). Each group of SLE and RA patients were subdivided into two subgroups according to disease activity. Clinical characteristics and disease activity score for both SLE and RA patients were assessed. Serum leptin levels (ng/dl) were measured using enzyme-linked immunosorbent assay (ELISA).*

*Results: Both patients with SLE and RA had significantly higher leptin levels than healthy control subjects ( $38.27 \pm 27.66$ ,  $27.73 \pm 14.58$  and  $2.73 \pm 0.85$  ng/dl respectively;  $P < 0.0001$ ). Patients with active SLE showed significantly higher leptin levels in comparison to inactive group ( $51.57 \pm 35.47$  versus  $26.62 \pm 10.92$  ng/dl;  $P < 0.0001$ ). While as, there were no significant difference in serum leptin levels between active and inactive groups of RA patients. Moreover, significant positive correlation was detected between serum leptin levels and degree of proteinuria in lupus nephritis patients. However, no relation could be detected between serum leptin and any of the clinical or laboratory parameters in patients*

*with rheumatoid arthritis.*

*Conclusion: Serum leptin levels significantly increases in both SLE and RA patients, and related to markers of disease activity in SLE but not in RA patients. Moreover, increased serum leptin levels were found to be related to degree of proteinuria in SLE patients. These results suggest that leptin could play a role in the pathogenesis of inflammatory phenomenon and disease activity in patients with systemic lupus erythematosus. While as, the precise role of leptin in rheumatoid arthritis patients remains uncertain, thus further studies including serum and synovial leptin in RA patients are recommended.*

## **AMBIGUOUS GENITALIA. DIAGNOSTIC DIFFICULTIES AND MANAGEMENT DILEMMA**

**Kamal A. Aly MD, Sohier Yahia MD\*  
and Ashraf Abd El-Rahman MD\*\***

*Departments of Pediatric Surgery, Pediatric\* & Radiology\*\*,  
Mansoura University Children's Hospital, Mansoura University, Egypt.*

### **Abstract**

*Ambiguous genitalia are considered as a medical and social neonatal emergency.*

*The aim of this work: was to through high lights about the management plan for patients with ambiguous genitalia (AG).*

*Patients and methods: The study included 27 patients with (AG) who were admitted at Mansoura University Children's Hospital in the period from 2002-2005. According to age of presentation, they were classified into 2 groups: group I: 24 infants complaining of (AG), group II: 3 patients aged from 15-17 years, 2 of them were male with under-virilization, the third one was reared as a female presented with bilateral inguinal swellings. Performed surgery was divided into: Exploratory surgery, excision of inappropriate tissues, feminizing or masculinizing genitoplasty.*

*Results: The study found that 63% of cases were female pseudohermaphrodite, 18.5% were male pseudohermaphrodite and 11.1% were true hermaphrodite while mixed gonadal dysgenesis was present in 7.4% of cases. Patient characteristics, biochemical changes, radiological findings, surgery performed and postoperative complications, all were reviewed.*

*Conclusion: Many aspects of diagnosis and management of AG are controversial and it is certain that the management is very complex and need to be individualized as much as possible.*

*Index words: Ambiguous genitalia, genitoplasty, sexual differentiation.*

## **EVALUATION OF REMIFENTANIL INFUSION IN PEDIATRIC AND GERIATRIC PATIENTS VERSUS FENTANYL-BASED ANESTHESIA**

**Mohamed Y. Seri MD, Essam A. El-Ghobashi MD,  
Mohamed Salem MD and Mostafa Mahdy MD\***

*Department of Anesthesia, Benha Faculty of Medicine,  
Zagazig University & Faculty of Medicine, Al-Azhar University\*, Egypt*

### **Abstract**

*The study comprised 30 children and 30 geriatric patients assigned to undergo short-duration lower abdominal surgery under general anesthesia, each group was divided into two equal subgroups according to opioid used: fentanyl (FP & FG) or remifentanil (RP & RG). Light anesthesia responses were recorded at time of induction, 1 min and 5 min after intubation, skin incision, and at wound closure, and 5-min after transfer to post-anesthetic care unit (PACU). Anesthetic recovery was assessed and the time the patients met PACU discharge criteria was recorded. Postoperative analgesia was assessed during the first 3 postoperative hours using observational pain-discomfort scale (OPS) in children and four-point verbal analogue scale (VrAS) for geriatric patients. Adverse events and the occurrence of postoperative nausea and vomiting (PONV) were recorded. Hemodynamic variables showed a non-significant difference ( $p>0.05$ ) between studied groups despite the non-significant ( $p>0.05$ ) hypotension occurred in fentanyl group. All patients received remifentanil showed superior emergence off anesthesia compared to those received fentanyl in the form of significantly ( $p<0.05$ ) shorter time to respire spontaneously, eye opening, extubation and verbalization and to qualify for PACU discharge compared to those received fentanyl. Number of children approached the criteria for PACU discharge at  $\leq 25$  min was maximum with remifentanil, (86.6%) compared to fentanyl, (66.7%). In geriatric patients, number of patients did not approach the criteria for discharge off PACU at  $\geq 60$  min was 33.3% and 66.7% in remifentanil and fentanyl groups, respectively, with a significant difference in favor of remifentanil. Fentanyl provided significantly ( $p<0.05$ ) better postoperative analgesia than remifentanil. PONV*

*had occurred in 5 and 4 patients in fentanyl and remifentanyl groups, respectively. Despite the apparent increased incidence of adverse events in fentanyl group, the difference was non-significant ( $p>0.05$ ). We can conclude that remifentanyl is appropriate for opioid-based anesthesia for patients in extremes of age for its hemodynamic stability and rapid recovery characteristics, however, attention must be paid for prophylactic antiemesis and proper postoperative analgesia*

**MOLECULAR CYTOGENETIC ANALYSIS OF  
PROGNOSTICALLY IMPORTANT CHROMOSOMAL  
ABERRATIONS IN CHILDHOOD ACUTE  
LYMPHOBLASTIC LEUKEMIA**

**Sahar A. F. Hammoudah MD  
and Abd El-Rhman M. El Mashed MD\***

*Departments of Clinical Pathology, Pediatrics\**

*Faculty of Medicine, Tanta University, Egypt*

**Abstract**

*Background: Although detection of chromosome aberrations in ALL has been improved by the development of cytogenetic techniques in conventional G-banding analysis, prognostically important structural or numerical chromosome aberrations may frequently go undetected using conventional G-banding alone due to poor chromosome morphology and few malignant metaphases.*

*Objectives: The present study was designed to estimate the incidences of different genetic subgroups in childhood ALL with abnormalities involving BCR/ABL, MLL, TEL/AML1 rearrangements, and p16 deletions using FISH technique and conventional cytogenetic analysis. We tried to demonstrate the usefulness of FISH technique.*

*Subjects and methods: This study was conducted on BMand/or BP from 48 patients with childhood ALL. Their age range from 2-13 years mean age was 6.7 years. Patients were followed-up for 18 months (range 14-28 months). Morphological, cytochemical, immunophenotyping, cytogenetic and FISH analysis were performed for every patient. FISH was performed with probes for BCR/ABL, MLL, TEL/AML1 rearrangements, and p16 deletions for each case of childhood ALL.*

*Results: Numerical and/or structural aberrations were identified in 52.1% of all cases by conventional G-banding alone. Numerical and/or structural aberrations were identified in 75% of all cases by the combination of conventional G-banding and interphase FISH. Gene rearrangements were disclosed by FISH in 11 (47.8%) of 23 patients who showed a normal banded karyotype or no mitotic cell in G-banding. The most com-*

mon gene rearrangement was p16 deletion (21.27%) and the incidences of others were 15.9% for TEL/AML1, 12.1% for MLL, and 5% for BCR/ABL rearrangement. p16 homozygous deletions were observed in six cases (12.7%) and hemizygous deletions in four cases (8.5%). One case had both in two different cell populations. p16 deletions were significantly more common among T-lineage ALL (T-ALL) patients than among precursor-B ALL patients. TEL/AML1 translocations were found in seven (7/44) (15.9%). Three out of the seven cases show culture failure and none of the remaining cases showed t(12;21) in G-banding analysis. All those seven patients were pre-B cell lineage according to standard immunophenotyping. One patient showed the loss of one AML1 signal in addition to the TEL/AML1 fusion. MLL rearrangements (11q23 abnormalities) was detected in 5/41 (12.1%) by combined conventional cytogenetic analysis and by FISH. Two different types of MLL gene rearrangements were observed in FISH analysis; translocation and deletion. One had split signal of the MLL gene caused by a translocation between chromosome 6 and 11 t(6;11), detected by conventional cytogenetics. Amplification of MLL gene was observed in one case (2.27%) Four of five cases with MLL translocations showed no chromosome abnormality involving 11q23 in G-banding analysis. All cases with MLL gene rearrangement were pre-B cell lineage according to standard immunophenotyping. BCR/ABL rearrangement: t(9;22)(q34;q11) was detected by conventional cytogenetic and by FISH in one case. Another one displayed BCR/ABL1 fusion signal by FISH only.

*Conclusion:* From the results of the present study it could be concluded that, FISH analysis using DNA probes specific for p16 deletion, TEL/AML1, MLL, and BCR/ABL gene rearrangements is a powerful tool for leukemia diagnosis and risk stratification and it should be used as a routine procedure for all patients with newly diagnosed ALL.

## **EVALUATION OF SERUM LEPTIN LEVEL IN PATIENTS WITH CHRONIC IDIOPATHIC THROMBOCYTOPENIC PURPURA (ITP)**

**Omar A. Sharaf Eldeen MD,  
Mohamed E. Elzaafarany MD\* and Raida S. Yahya MD\*\***

*Departements of Clinical Pathology, Internal Medicine\**

*and Mansoura University Children Hospital\*\**

*Faculty of Medicine - Mansoura University - Egypt.*

### **Abstract**

*Idiopathic thrombocytopenic purpura (ITP) constitutes the prototype of autoimmune disease characterized with the autoantibodies against platelet antigens. Recently, more evidences have been found related to the effects of hormones on the immune system, including their effect on autoimmunity. Leptin constitutes a hormone synthesized by the adipose tissue that binds with a receptor which is a member of the class I cytokine receptor family. The aim of this study was to evaluate serum leptin levels in order to determine the role of leptin in the pathogenesis of ITP. This study comprised 40 patients with chronic ITP besides, 20 healthy controls of similar age, sex and body mass index (BMI). Serum leptin levels were measured by enzyme amplified sensitivity immunoassay (EASIA) We found that the mean serum leptin level in patients with ITP is (24.63 ± 14.93 ng/ml) was significantly higher (P < 0.001) than in healthy controls (6.54 ± 3.68 ng/ml). Furthermore, the positivity of PAIgG and platelet count was significantly different between leptin-positive (level greater than mean ± 2 SD control value) and leptin-negative patients. From the present study we could conclude that leptin might play an important role in the pathogenesis of ITP.*

## **CORONARY STENTING VERSUS BALLOON ANGIOPLASTY IN SMALL VESSELS**

**Megahed Nofal MD**

*National Heart Institute, Egypt*

### **Abstract**

**Background:** Stenting is well established to be superior to balloon angioplasty in *de novo* lesions in large native vessels. However, in small vessels, the benefit of stenting remains questionable.

**Methods and Results:** The study included 120 symptomatic patients with *de novo* lesions located on a small coronary segment (< 3 mm). They were randomly assigned to either stent implantation (60 patients, 67 lesions) or standard balloon angioplasty (60 patients, 69 lesions). The primary end point was the angiographic restenosis rate at 6 months. After the procedure a larger acute gain was achieved with stent placement ( $1.47 \pm 0.40$  versus  $1.1 \pm 0.43$  mm,  $p < 0.001$ ), resulting in a larger minimal luminal diameter ( $2.18 \pm 0.45$  versus  $1.83 \pm 0.41$  mm,  $p < 0.001$ ). Major adverse cardiac events were comparable in both groups. At 6 months, follow up net gain was higher in the stent group ( $0.91 \pm 0.51$  versus  $0.62 \pm 0.53$  mm,  $p < 0.01$ ). Angiographic restenosis rate was 31% in the stent group versus 52% in the balloon group ( $p < 0.01$ ), a risk reduction of 40%. Repeat target lesion revascularization was less frequent in the stent group (15% versus 28%,  $p < 0.01$ ).

**Conclusion:** Elective stent placement in small coronary arteries is safe and associated with a reduction in restenosis rate at 6 months.

**THE EFFECT OF PREOPERATIVE DELAY ON  
SURVIVAL AFTER RADICAL CYSTECTOMY  
FOR BLADDER CANCER:  
A SINGLE CENTER EXPERIENCE**

**Alaa A. Mokhtar MD**

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

**Abstract**

*Purpose: The advantage of early radical cystectomy for the treatment of bladder carcinoma is controversial. Earlier reports had inconsistent results. This is probably related to different patient selection and end point criteria, having unbalanced number of patients or lacking pathological correlation. We set out to assess the impact of preoperative delay on cancer specific survival after radical cystectomy monotherapy in a single tertiary care hospital.*

*Methods: We followed all patients that underwent radical cystectomy for invasive bladder cancer treated from 1980 to 2003. We identified demographic, clinical and pathological data. Treatment delay was defined as time from pathological confirmation of invasive disease to performance of cystectomy. Patients were then divided into two groups on the basis of the median delay cut-off period. The two groups were compared. Univariate and Multivariate analyses were used to determine the effect of the time period on disease-free survival.*

*Results: A total of 227 patients 180(79%) male and 47(21%) female were involved in the study. The patient's median age was 57 years (range 21 to 81). Follow-up ranged from 4 to 223 months (median 34.6 ± 42 months). The median treatment delay was 75 days (range 3 to 247). Disease free survival was significantly better for patients with pretreatment delay ≤75days (61%) compared with >75 days (18%) (P< 0.0001). Patients with long treatment delay >75days had a significantly more advanced bladder carcinoma (pt3, pt4) compared to the early treatment*

*group ( $p < 0.0239$ ). Multivariate analysis revealed that among all the studied clinical and pathological factors, lymph node involvement and preoperative delay were the only significant and independent factors.*

*Conclusion: In a single center experience, patients with bladder cancer whom radical cystectomy is indicated showed significantly more advanced pathological stage and significant decrease in disease free survival if treatment was delayed more than 75 days.*

*KEY WORDS: bladder; bladder neoplasm; cystectomy; survival*

## **VASCULAR ENDOTHELIAL GROWTH FACTOR (VEGF) IN SERUM AND PERITONEAL FLUID OF PATIENTS WITH ENDOMETRIOSIS**

**Moustafa Z. Moustafa MD and Ehab Nayel MD\***

*Departments of Obstetrics & Gynaecology  
& Clinical Pathology\* Faculty of Medicine. Tanta University, Egypt*

### **Abstract**

*Endometriosis can be defined as a non-neoplastic disease in which an endometrium-like tissue implants itself outside the uterine cavity conserving its histological and functional structure. VEGF concentration elevates in peritoneal fluid of patients with endometriosis which indicate that VEGF is also modulated in the serum of these patients. The aim of this study is to determine the behavior of VEGF in plasma and peritoneal fluids of patients with endometriosis, also correlation between VEGF level and stage of endometriosis. This study was carried out on 60 infertile patients. They were divided after laparoscopy into two groups study group including 40 endometriotic patients and control group including 20 patients without endometriosis. The study group was subdivided into two subgroups according to stage of endometriosis first subgroup (a) including 20 patients with minimal to mild endometriosis and subgroup (b) including 20 patients with moderate to severe endometriosis VEGF levels were measured by enzyme Linked immunosorbent assay (ELISA) in serum and peritoneal fluid of all patients. The mean VEGF levels were significantly increased in serum and peritoneal fluid samples of cases with endometriosis compared with control cases, this increase was statistically significant in patients with moderate to severe stage. Also VEGF levels in peritoneal fluids was greater than that of the serum levels which was also significant in patients with moderate to severe stage. Conclusions : VEGF is present in increased amount in the serum and peritoneal fluid of women with endometriosis. This increase correlates with the stage of the disease.*

**CORRELATION OF SERUM LEPTIN  
LEVELS WITH METABOLIC PARAMETERS  
AND BIOCHEMICAL LIVER FUNCTION IN  
PATIENTS WITH CHRONIC  
HEPATITIS C VIRUS INFECTION**

**Mohamed A. Afifi MD\* and Dina Elshabrawy MD\*\***

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

**Abstract**

*AIM: To determine serum leptin levels and investigate their correlations with anthropometric and metabolic parameters and biochemical liver function in patients with chronic hepatitis C virus (HCV) infection and their potential clinical implications.*

*METHODS: Forty-two chronic HCV-infected patients without anti-viral treatment were enrolled in this study, 30 patients had chronic hepatitis C, 10 had cirrhosis, and 2 had hepatocellular carcinoma (HCC). Thirty age- and sex-matched healthy individuals served as controls. Serum leptin levels were determined by ELISA. The biochemical liver function and serum lipids were determined at the same time. The height and body weight of patients and controls were measured, and body mass index (BMI) and body fat were calculated simultaneously. The correlations of serum leptin levels with anthropometric and metabolic parameters and biochemical liver function were assessed statistically.*

*RESULTS: The mean of serum leptin levels in patients with chronic hepatitis C, HCV-associated cirrhosis, HCV-associated HCC and control groups was (6.13±3.94), (5.25±4.21), (4.17±0.28), and (3.59±3.44) ng/mL, respectively. The serum leptin level in patients with chronic hepatitis C was significantly higher than that in controls. The serum leptin levels between cirrhotic patients and controls and between male and female cirrhotic patients had no significant difference. Serum leptin levels were positively-correlated with body fat, BMI, and apolipoprotein B (Apo B) in pa-*

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*tients with chronic HCV infection. The serum alanine aminotransferase (ALT) levels were closely-correlated with BMI in patients with chronic hepatitis C.*

*CONCLUSION: HCV infection interferes with fat and lipid metabolism in patients with chronic HCV infection and leptin may play a role in hepatosteatosis.*

**SURGICAL AND ENDOSCOPIC  
PALLIATIVE PROCEDURES FOR  
PATIENTS WITH ADVANCED PERIAMPULLARY  
TUMORS A RETROSPECTIVE STUDY**

**Tharwat S. Kandiel MD**

*Gastro-Enterology Surgical Center*

*Mansoura University, Egypt*

**Abstract**

*Pancreatic cancer is the fourth common cause of cancer-related deaths in western world (Huguier and Mason 1999). Most patients with pancreatic and periampullary cancer present late in their course and have either locally extensive or metastatic disease (Moossa and Gamagami 1995). The optimal palliation is crucial because patients with advanced disease have a limited life expectancy and because the symptoms of the progressive disease are often unbearable (Pretre et al 1992). This single center retrospective study aims to evaluate the results of surgical and endoscopic palliative procedures for patients with advanced periampullary tumors. Between January 1995 and December 2004, 945 patients with periampullary and pancreatic tumors were admitted and managed at gastroenterology Center, Mansoura, Egypt. Seven hundred twenty nine patients (729) with advanced disease were studied, 459 were males & 270 were females (ratio 1.7:1) and the mean age was 59.4±11.5 (range12-77) years. One hundred patients (10.6%) underwent palliative surgical biliary bypass with or without Gastro-jejunostomy (GJ), The median survival for this group was 7.4 months. Six hundred and twenty nine (66.6%) patients were not candidates for surgical resection. ERCP and endoscopic stenting was tried in all patients with success rate of 92.2%. 580 patients were successfully managed via ERCP and stent. For the remaining 49 patients PTD was possible in 47 (7.4%) while 2 (0.4%) patients were not fit for any palliative procedure due to LCF, ascitis and the poor general condition. The median survival for this group was 3.8*

*months. In the current study, patients with resected periampullary carcinomas (resection group had the longest median survival (19 months), whereas, patients who underwent palliation (surgical and endoscopic palliation groups) had markedly shorter median survival (7.4 and 3.8 months, respectively). These results reflect the proper selection of cases for each procedure and also, despite the non-randomization of this study, underscore the importance of resection of these aggressive tumors if possible.*

**A STUDY FOR THE EFFECTIVENESS OF  
USING A LARGE DIAMETER SILICONE  
CYLINDER AT THE OSTEOTOMY OF  
DACRYOCYSTORHINOSTOMY**

**Mostafa A. Haikal MD**

*Department of Ophthalmology,  
Faculty of Medicine, Benha University, Egypt*

**Abstract**

*Purpose: To evaluate the efficacy of using a large diameter silicone cylinder at the osteotomy of dacryocystorhinostomy.*

*Methods: Thirty two eyes of 30 patients diagnosed with primary acquired nasolacrimal duct obstruction were assigned randomly to either a silicone cylinder group or a control group. The surgical procedures in both groups were exactly the same, except that in the patients of the silicone group, a special piece of large diameter silicone cylinder was placed at the osteotomy opening and removed after 3 months. Transnasal endoscopic findings were recorded at the completion of surgery and at 3 months, 6 months and 9 months after surgery for the two groups. The silicone cylinder group consisted of 20 patients and the control group consisted of 12 patients. A computer-aided digitizer was used to calculate the surface area of the osteotomy site.*

*Results: All patients in the silicone cylinder group remained symptom free after removal of their silicone tube (100% success). Three patients in the control group had recurrent epiphora (75% success). Septo-osteotomy adhesion was found in three patients in the control group (25%), but there was no such adhesion found in patients of the silicone cylinder tube group. The average final surface area of the osteotomy opening of patients with silicone cylinder tube at the end of follow up was  $17.61 \pm 5.78$  mm<sup>2</sup> whereas that of the control group was only  $8.40 \pm 4.41$  mm<sup>2</sup>. The difference between the two groups was statistically significant.*

*Conclusion: Using our modified silicone tube is effective in maintaining*

Mostafa A. Haikal

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*a larger osteotomy after dacryocystorhinostomy. This modification can improve the success rate over the conventional dacryocystorhinostomy procedure.*

**OPTIMIZING THE ACCURACY OF TRANSVAGINAL  
ULTRASONOGRAPHY OF THE ENDOMETRIUM:  
A POWER DOPPLER STUDY IN WOMEN WITH  
POSTMENOPAUSAL BLEEDING**

**Nehad M. H. Eissa MD\*, Tarek M. Sayyed MD\*  
and Osama M. Ebied MD\*\***

*Departments of Obstetrics and Gynecology\*, Radiology\*\*,  
Faculty of Medicine Menoufiya University, Egypt*

**Abstract**

**Objective:** *To assess the diagnostic value of power Doppler ultrasonography in evaluating endometrial pathology in women with postmenopausal bleeding.*

**Methods:** *A cross sectional study included sixty nine women with postmenopausal bleeding. All patients had power Doppler study of uterine and endometrial vessels as well as endometrial thickness measurements.*

**Results:** *The mean endometrial thickness in patients with non-neoplastic endometrial pathology was significantly different from those with neoplastic pathology ( $5.9 \pm 3.7\text{mm}$ , versus  $13.2 \pm 5.1\text{mm}$ ,  $P < 0.001$ ). There was no significant difference in the mean  $\pm$  SD RI and PI of uterine artery between patients with neoplastic and non-neoplastic endometrium. There was statistically significant difference in the rate of positive visualization of endometrial blood flow between cases of neoplastic endometrium (41.4%) and non-neoplastic one (2.5%) ( $P < 0.001$ ). Meanwhile, endometrial artery RI was significantly different when compared between cases of neoplastic pathology ( $0.56 \pm 0.07$ ) and non-neoplastic pathology ( $0.65 \pm 0.09$ ) ( $P < 0.05$ ).*

**Conclusion:** *Power Doppler ultrasonic evaluation of endometrial blood flow may contribute to the correct diagnosis of endometrial disease in symptomatic postmenopausal patient and is considered a specific non invasive procedure that may limit the need for endometrial biopsy procedure to some particular patients.*

**Key Words:** *Power Doppler, Endometrial pathology, postmenopausal bleeding.*

## **OPEN APPROACH FOR SECONDARY RHINOPLASTY**

**Ahmed Albarah MD and Yaser Khalil MD\***

*Departments of General surgery and E.N.T\*,  
Faculty of Medicine, Menofyia university., Egypt*

### **Abstract**

*Revision Rhinoplasty presents reconstructive challenges to the nasal surgeon different from those encountered in primary surgery. The patient requesting secondary Rhinoplasty presents complex psychological as well as anatomical problems to the nasal surgeon. In this study 25 patients with variable postoperative nasal deformities are managed by the open approach Rhinoplasty. Postoperatively, 80% of the patients were satisfied with their aesthetic results and the remaining 20% had minor problems that may require further surgery; there were no problems with the transcolumellar scar. The Nasal obstruction was improved in 83% of patients with preoperative nasal obstruction. The open approach gives the surgeon complete anatomic exposure that allows him to perform all his surgical tasks more accurate and easily than the closed approach.*

## **EPIDEMIOLOGICAL AND CLINICAL STUDY OF KAWASAKI DISEASE IN A TERTIARY HOSPITAL IN MAKKAH**

**Ahmed A. Azab MD, Wael A. Shahin MD\*,  
Ahmed H. Nassar MD\*\*, Tarek S. Ibrahim Ph.D\*\*\*,  
Inas A. Saad MD\*\*\*\* and Ahmed J. Al-Zahrany MD**

*Departments of Pediatrics and Tropical Medicine\*, Benha University;  
Dermatology and Venereology\*\*, Tanta University, Child Health,  
Cairo National Research Center\*\*\*; and Pediatrics, Cairo University\*\*\*\*; Egypt,  
and Department of Pediatrics, Al-Noor Specialist Hospital,  
Holy Makkah, Kingdom of Saudi Arabia,*

### **Abstract**

*This study involved 36 Kawasaki Disease patients diagnosed during the period from September 2000 to August 2004 at Al-Noor Specialist Hospital, Holy Makkah. Collected data included clinical features, laboratory results, echocardiogram findings, treatment, complications, and outcome. The average of 9 patients were diagnosed yearly, their age ranged from 6 months to 11 years and male to female ratio was 3.5:1. The clinical presentations were fever, skin rash and oral mucosa abnormalities (100%), desquamation of finger tips (88%), edema of palms and soles (77%), conjunctivitis (66%), and cervical lymphadenopathy (58%). Seventy eight percent of cases presented in the summer and spring. Laboratory data showed leucocytosis, thrombocytosis, and high ESR. Echocardiography showed left coronary artery dilatation in 15 patients (42%), 10 of them (28%) had also right coronary artery dilatation. Coronary artery lesions had regressed in 11 cases (31%), while 4 patients (11%) progressed to giant aneurysms. Intravenous immunoglobulins (IVIGs) and aspirin were given. Neither cardiac dysfunction, nor valvular affection was observed; also, no recurrence and none died. In conclusions; although Kawasaki disease is a rare disease, 36 cases were diagnosed in Holy Makkah in 4 years, 4 of them progressed to giant coronary artery aneurysms. Increased awareness of the disease could help in early diagnosis and treatment and lower the rate of complications.*

## **THE RISK OF CARDIOVASCULAR DISEASE AND DEPRESSION IN HEALTH CARE WORKERS DUE TO WORKPLACE BULLYING**

**Abdelbary F. Abdelbary MD Ateyah T. Aransa MD\*  
and Abdelsalam Abo-El Naga MD\*\***

*Departments of Community, Environmental and Occupational Medicine,  
Neuropsychiatry\*, Benha Faculty of Medicine, Benha University,  
Cardiology Shebeen El-kom Teaching Hospital. \*\*, Egypt*

### **Abstract**

*Aims: To examine exposure to workplace bullying as a risk factor for cardiovascular disease and depression in employees.*

*Methods: Logistic regression models were related to prospective data from two surveys in a cohort of 969 hospital employees (63 men and 480 women), aged 18–60 years. Outcomes were new reports of doctor diagnosed cardiovascular disease and depression during the two year follow up among those who were free from these diseases at baseline.*

*Results: The prevalence of bullying was 5% in the first survey and 6% in the second survey. Two per cent reported bullying experiences in both surveys, an indication of prolonged bullying. After adjustment for sex, age, and income, the odds ratio of incident cardiovascular disease for victims of prolonged bullying compared to non-bullied employees was 2.3 (95% CI 1.2 to 4.6). The association between prolonged bullying and incident depression was significant, even after these adjustments (odds ratio 4.2, 95% CI 2.0 to 8.6).*

*Conclusions: A strong association between workplace bullying and subsequent depression suggests that bullying is an etiological factor for mental health problems. The victims of bullying also seem to be at greater risk of cardiovascular disease.*

## **PHACOEMULSIFICATION IN EYES WITH PREVIOUSLY BY FUNCTIONING FILTERING BLEBS**

**Sherif N. Abdel Salam MD, Walid Abdel Ghaffar MD  
and Ahmed El Barqui MD**

*Department of Ophthalmology, Benha Faculty of Medicine , Egypt*

### **Abstract**

*Purpose: To evaluate the effect of clear corneal phacoemulsification on glaucomatous eyes that has had previously successful filtering surgery.*

*Methods: This study was undertaken in 21 eyes with glaucoma that had phacoemulsification after successful trabeculectomy. The interval between trabeculectomy and phacoemulsification ranged between 15 to 26 months. Only those cases who had IOP <21mmHg over the preceding 6 months without any medical treatment following trabeculectomy were included in this study. All patients underwent phacoemulsification through a superior clear corneal, three-stepped, 1.5 mm long tunneled incision and in-the-bag PMMA intraocular lens implantation. Surgical difficulties, complications, postoperative intraocular pressure and best corrected visual acuity were studied and analyzed over a follow up of 6 months.*

*Results: Complications seen during the surgery were corneal edema in 5 eyes (23.8%), iris trauma in two eyes (9.52%), tear in the rhexis in two eyes (9.52%), vitreous loss in one eye (4.76%) and early increase in IOP in one eye (4.76%). Postoperatively, visual acuity improved in all cases. Mean IOP increased after phaco-emulsification by about 1.23 mmHg (preoperatively 14.84±2.73mmHg), 6 months postoperatively (16.26±1.2 mmHg). Difference in IOP at all patients during follow up period was found to be statistically insignificant (P>0.05).*

*Conclusion: Clear corneal phacoemulsification in previously filtered glaucomatous eyes is feasible although difficult. However, with slight modification in the technique, it can be accomplished without sight - threatening complications. In addition, it does not adversely affect the functioning of the bleb.*

**EFFECTS OF PREOPERATIVE INTRAVENOUS  
TENOXICAM AND METHYLPREDNISOLONE  
ON SURGICAL OUTCOME AFTER  
LAPAROSCOPIC CHOLECYSTECTOMY :  
A PROSPECTIVE, RANDOMIZED PLACEBO,  
DOUBLE BLIND STUDY**

**Ghada F. El-Rahmawy MD**

*Department of Anaesthesiology,  
Faculty of Medicine, Mansoura University, Egypt*

**Abstract**

*Laparoscopic cholecystectomy (LC) is a commonly preferred surgical technique. But, postoperative pain, fatigue and vomiting are dominating symptoms after (LC). The current work was designed to compare the effects of preoperative intravenous Methylprednisolone versus tenoxicam in patients submitted for laparoscopic cholecystectomy on the patients outcomes( pain, fatigue, emesis and discharge criteria). Methods: This prospective, randomized placebo, double blind study was accomplished on thirty six patients (20-55 years) with ASA physical status I and II, scheduled for laparoscopic cholecystectomy. The patients were randomly allocated into three groups, 12 each according to the drug infused 30 minutes before induction of general anaesthesia in a volume of 100 ml normal saline. Control group (group C) received normal saline (0.9 NaCL), Tenoxicam group (group T) received 20mg Tenoxicam and Methylprednisolone group (group M) received 125mg (Methylprednisolone, all drugs were diluted in normal saline, all patients were anaesthetized by standard general anaesthesia technique. Peri-operative mean arterial blood pressure, heart rate, and SPO<sub>2</sub> were recorded. Also, recovery time, fatigue, pain, supplemental analgesia requirements and sedation were assessed after recovery for 24 hours. Also the incidence of nausea, vomiting and pruritus were recorded. Result: There were no differences between the three groups in the patient's characteristics, duration of surgery, recovery time and hemodynamic data. There was a significant increased in the duration of postoperative analgesia in group (T) and group (M) in comparison to*

Ghada F. El-Rahmawy

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group (C) , moreover the duration of postoperative analgesia was significantly increased in group(M) in comparison to group( T ). Group (M) received significantly less doses of declofenac than group(C) and group( T ) in the first 24 hours postoperative. In addition , Emesis and fatigue scores were significantly decreased in group (M)and early discharged to the home in the first 24 hours in compared with the other two groups. Conclusions: Methylprednisolone improved surgical outcome after LC in terms of significantly less pain, fatigue, nausea, and vomiting, and patients resumed their recreational activity significantly faster compared with the Tenoxicam and placebo.

*Key ward: Anaesthesia, Laparoscopic cholecystectomy, Methylprednisolone, tenoxicam.*

## **ROPIVACAINE 0.2% VERSUS LIDOCAINE 0.5% FOR INTRAVENOUS REGIONAL ANESTHESIA**

**Hala Mohey El-Dien El-Gendy MD, Barrima MA.E. MD,  
Salama I. El-Hawary MD and Ateia Gad Ibrahim MD**

*Department of Anesthesia, Faculty of Medicine, Tanta University, Egypt.*

### **Abstract**

*Purpose: This study was designed to compare the anesthetic efficacy, post block analgesia, local and systemic related side effects between ropivacaine 0.2% and lidocaine 0.5% when used for forearm intravenous regional anesthesia I.V.R.A..*

*Patients and methods: The study comprised 50 patients, allocated randomly into two groups; lidocaine group (gp I) and ropivacaine group(gpII). Before distal tourniquet deflation, visual analogue pain score (VAS) and verbal rating score (VRS) were recorded at the operative site and at the tourniquet site every (5) minutes until deflation of the distal tourniquet . Tourniquet tolerance was recorded for each patient in both groups, intravenous boluses of fentanyl (25)  $\mu$ gm were given to relieve tourniquet pain with maximum of (3)  $\mu$ gm/ kg through the cannula of the healthy arm and the total dose of fentanyl was recorded for each patient in both groups. Routine monitoring were applied continuously, during surgical procedure (ECG, pulse oximetry, non-invasive blood pressure).*

*After distal tourniquet deflation (VAS) and (VRS) were recorded every 10 minutes for 90 minutes, sedation score was recorded every 10 minutes for 60 minutes and hemodynamic changes (mean arterial blood pressure ) were also recorded every 15 minutes for 45 minutes after distal tourniquet deflation, and any adverse effects of the added drugs were recorded in both groups.*

*Results: The results of this study showed that (VAS) and (VRS) at site of surgery and the tourniquet before distal tourniquet deflation were significantly lower in group II compared with group I, tourniquet tolerance*

*was significantly longer in group II compared with group I, the total dose of fentanyl given to relieve tourniquet pain was significantly lower in group II compared with group I as no patient in group II required fentanyl to relieve tourniquet pain.*

*After distal tourniquet deflation (VAS) and (VRS) were significantly lower in group II compared with group I, sedation score was significantly higher in group I compared with group II as regarding mean arterial blood pressure it did not change significantly in group II compared with group I.*

*SUMMARY & CONCLUSION: We conclude that ropivacaine provides anesthesia & superior post operative analgesia compared with lidocaine in intravenous regional anesthesia.*

**LESS INVASIVE MONITORING METHOD FOR  
CENTRAL HEMODYNAMIC (CO & SVR) VS  
PERIPHERAL CHANGES DURING  
LAPAROSCOPIC CHOLECYSTECTOMY IN HIGH  
RISK PATIENTS WITH COEXISTING MEDICAL  
DISEASES BY USING CARDIODYNAMIC  
BIOZ ICG MONITOR**

**Wagih Ouda A. MD, Hamida G. M. Aoda MD  
and Osama Abu Fotouh MD**

*Department of Anesthesiology, Faculty of Medicine,  
Zagazig University, Egypt*

**Abstract**

*We investigated cardiovascular performance and (peripheral & central) changes in 24 patients (mean age 60 yr) with significant coexisting cardiopulmonary disease (hypertension, coronary artery disease, chronic obstructive pulmonary disease) during laparoscopic cholecystectomy under general anesthesia. Hemodynamic monitors included non invasive arterial pressure and femoral vein catheter in combination with Bioz ICG monitor for measurement of central hemodynamic (CO & SVR) by trans-thoracic impedance technique. Peripheral & central hemodynamic changes were obtained at five measurements: baseline (after induction of anesthesia), insufflation (after pneumoperitoneum, supine position), Trendelenburg 5 (5 min after placement into Trendelenburg's position), Trendelenburg 20 (at 20 min in Trendelenburg's position), and end (after release of the pneumoperitoneum, supine position). Hemodynamic responses to peritoneal insufflation resulted in significant increases in systemic vascular resistance (SVR) and significant decreases in cardiac index (CI) compared with baseline. Trendelenburg's positioning augmented ventricular preload and performance, resulting in significant increases in CI, with insufflation. In an elderly population with significant coexisting cardiopulmonary disease, intra-operative maneuvers required for laparos-*

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*copic cholecystectomy resulted in previously undescribed alterations of cardiovascular performance, which persisted after release of the pneumoperitoneum.*

**THE FREQUENCY OF NEUROLOGICAL  
SOFT SIGNS IN PATIENTS WITH  
OBSESSIVE-COMPULSIVE DISORDER :  
A VOLUNTEER-CONTROLLED STUDY**

**Abd Al-Nasser Mourad MD, Khaled Salam MD  
and Mohamed El-Hamady MD\***

*Department of Neurology & Psychiatry\*,  
Benha Faculty of Medicine, Zagazig University , Egypt*

**Abstract**

*This study was designed to compare the frequency of neurological soft signs (NSS) in patients with obsessive-compulsive disorder (OCD) and healthy volunteers and to evaluate the applicability of these signs as a test to identify patients with OCD among mixed population. The study comprised 20 patients with OCD diagnosed with the use of the American Psychiatric Association's Diagnostic and Statistical Manual of Mental Disorders, fourth edition (DSM-IV) and 20 healthy volunteers of cross-matched age and sex as a control group. All study participants underwent a physical and neurological examination for soft signs (PANESS) by the neurologist who was blinded about the group enrollment. The frequency of occurrence of disturbances in these 7 main items was evaluated and the obtained results were redistributed according to group of study; patients and controls. Only 8 patients (40%) were free of NSS; the other 12 patients (60%) showed varied NSS. On contrary, only 2 controls (10%) had NSS while the remaining 18 (90%) showed no NSS with a significantly increased ( $X^2=5.8$ ,  $p<0.01$ ) frequency of NSS in patients. Both patients and controls did not show NSS on examination of both motor movements and stereogonosis and no body had nystagmus. Three patients had apraxia and 3 had abnormal two-point discrimination; the other 6 patients had various combinations of abnormal results. There was a negative non-significant correlation between mean NSS scores and patients' age, sex and duration of symptoms. Using the receiver operating*

*characteristic (ROC) curve analysis judged by the area under the curve (AUC) revealed that the presence of NSS could define patients with OCD out of a mixed population with high sensitivity but could not be considered specific for OCD as the AUC was 0.236. It could be concluded that the frequency of neurological soft signs is significantly higher in OCD patients and could identify them among a mixed population with high sensitivity but they are not specific to OCD.*

**SCHOLASTIC ACHIEVEMENT, PHYSICAL AND  
PSYCHOSOCIAL ASPECTS OF QUALITY OF  
LIFE IN CHILDREN WITH TYPE 1  
DIABETES MELLITUS**

**Eman A. Al-Bitar MD, Mohamed M. El-Hamady MD\*  
and Mohamed Khaled MD\*\***

*Departments of Community, Environmental & Occupational Medicine;*

*\*Neuropsychiatry and \*\*Pediatric, Benha Faculty of Medicine, Benha University , Egypt*

**Abstract**

*In recent years there has been an increase in the number of young people with type one diabetes in countries worldwide. This cross sectional study was conducted on 170 children (students in basic education) with type 1 diabetes mellitus to study the impact of the disease and glycaemic control on their scholastic achievement, physical and psychosocial aspects of quality of life. They were selected by systematic random sampling method from diabetic clinics in Benha University Hospital and Benha Teaching Hospital. A group of 120 matched controls were selected from the residents of the same areas. All subjects were clinically examined and interviewed using special structured questionnaire to assess their physical, psychological and social domains and scholastic achievement. Psychometric measures were also done to assess level of anxiety, depression and I.Q score among them. Glycaemic control for the cases was assessed by glycosylated haemoglobin (HbA 1C) level. This study revealed that the quality of life of the studied groups regarding physical, psychological & social domains and scholastic achievement were significantly impaired in the affected children more than those in control group ( $P < 0.05$ ). The diabetic children showed significantly higher levels of anxiety and depression and lower level of IQ score than those in the normal group. Children with type 1 diabetes who had poor glycaemic control were found to have higher levels of psychological and social distress and lower level of scholastic achievement. Hence the study recommended implementing a program to improve the quality of life of diabetic children as well as regular psychiatric evaluation and interventions for those children.*

## **RESPIRATORY DISORDERS AMONG WORKERS IN A PHOSPHATE FERTILIZERS MANUFACTURING PLANT**

**Mahmoud E. Abou Salem MD**

*Department Community, Environmental and Occupational Medicine*

*Faculty of Medicine, Menoufiya University , Egypt*

### **Abstract**

*Chronic inhalation of phosphate dust causes lung fibrosis which may be due to the silica impurity. To study respiratory disorders among workers in a phosphate fertilizers manufacturing plant, 63 exposed and 63 non-exposed workers (as a control group) were chosen for this reason. Each chosen person was subjected to a questionnaire including personal data; medical examinations; and spirometric measurements. Results showed that, the respiratory manifestations as cough, expectoration, dyspnea, wheezes, and crepitations were significantly prevalent among exposed workers than control ones. Significant decrease in the mean levels of spirometric measurements were found among exposed workers than among the control group for FVC%, FEV1%, PEF% & FEF25-75% , while FEV1/ FVC% ratio did not change. This decrease in all measured spirometric values among exposed workers was marked with increased length of duration of work and among smokers than non-smokers workers. It is recommended that: spirometric measurements must be included in periodic medical examinations to assess exposure disorders in such industry; smoking should be prohibited to avoid interaction with occupational exposures and further studies on a wide scale should be done to evaluate other disorders which may arise in this industry.*

## **FLEXIBLE INTRAMEDULLARY NAILING OF DISPLACED FOREARM FRACTURES IN CHILDREN**

**Sameer Zahed MD**

*Orthopaedic Department, Banha University, Egypt*

### **Abstract**

*Background and purpose: a reasonable number of fractures of both bones forearm, especially in the age group 7- 13 years, fails to reduce or loss reduction soon after manipulation and casting. This study evaluates the use of closed flexible titanium nailing of such unstable fractures.*

*Patients and methods: 48 unreduced or unstable both bones forearm fractures in children with a mean age of 9 years were pinned by flexible titanium nails. The fixation was done closed under image intensifier and followed both clinically and radiologically for a mean period of 14 months.*

*Results: All the fractures healed eventually with no refracture. Transient superficial radial nerve numbness occurred in 5 cases and delayed union of the ulna occurred in 2 cases. Variable degrees of limitation of forearm pronation and supination were encountered in 12 cases but the ultimate forearm function and power grip was not affected.*

*Conclusion: Intramedullary fixation of an unstable forearm fracture in skeletally immature patients is a safe, child-friendly, minimally invasive technique that allows early treatment with an excellent functional and cosmetic outcome.*

## **MINIPLATE ARTHRODESIS OF THE FIRST METATARSOPHALANGEAL JOINT IN HALLUX RIGIDUS**

**Sameer Zahed MD, Mohamed EL Ashhab MD  
and Abd EL Bary Gouda MD**

*Department of Orthopaedic, Banha University Hospital, Egypt*

### **Abstract**

*Hallux rigidus refers to limitation of motion of the metatarso-phalangeal joint of the great toe. For patient who had diffuse osteoarthritis of the first metatarso-phalangeal joint, arthrodesis is a reasonable alternative if non-operative measures fail.*

*In the current series, 25 feet grade III and IV hallux rigidus were treated by arthrodesis of the first metatarso-phalangeal joint using a low profile miniplate and screws. After an average follow up period of 22 months, clinical examination showed good cosmetic and functional results in most of cases. Of the 25 feet, 23 (92%) had less or no pain postoperatively. Good radiological union was observed in 23 feet at a mean of 7 weeks. The complications were infrequent; mainly non-union in 2 feet (8%).*

*This study concludes that patients of advanced grades of hallux rigidus with significant pain, limitation of joint motion, marked loss of articular cartilage, and osteophytes formation are best treated by arthrodesis of the metatarsophalangeal joint using miniplate for fixation.*

**ERRORS BY ANAESTHETISTS IN CALCULATING  
PAEDIATRIC DRUG DOSES; CAN THEY BE  
PREVENTED BY A PAEDIATRIC DRUG  
DOSES CHART?**

**Mohamed A. Hashem MD**

*Anaesthesia Department, Ysbyty Gwynedd, Bangor, UK.*

**Abstract**

**Background and Goal of Study:** *Errors in calculating paediatric anaesthetic and resuscitation drugs are not uncommon (Kozer et al, 2002) and can be fatal (Rowe et al, 1998). We investigated whether the practical incidence of these errors can qualify for a quick assistance tool e.g. a paediatric drug doses chart.*

**Materials and Methods:** *A questionnaire audit distributed to anaesthetists in Morriston Hospital, Swansea that included calculations of doses for a hypothetical 12 kg boy presenting for an emergency open reduction of a compound tibial fracture.*

**Results and Discussion:** *15 anaesthetists returned their answers; none of them was a dedicated paediatric anaesthetist. 44% of answers were either wrong or not known. Best performances were by specialist registrars and the highest score (80%) belonged to one of them. The worst answers belonged to consultants; one of them scored 20%. Anaesthetic drugs were marginally better answered than resuscitation drugs.*

**Conclusion:** *The incidences of wrong and void answers were striking. Quick assistance tools e.g. a paediatric drug doses chart for each weight ready calculated in millilitres are advisable to prevent paediatric patients receiving wrong drug dosages. This presented chart is the first of its kind to appear in the medical literature.*

## **STUDY OF AUTONOMIC FUNCTION IN LIVER CIRRHOSIS AND HEPATOCELLULAR CARCINOMA**

**Mohamed M. Hamouda MD, Osama E. El-Agroudy MD\*,  
Hala Abd El-Hafez MD and Noha Mahmoud MSc**

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

### **Abstract**

**Background and aim:** cardiovascular autonomic neuropathy is a known, but often unrecognized complication of liver cirrhosis and it can lead to many adverse effects including increased risk of mortality. However, few published studies are available about autonomic dysfunction in non alcoholic liver disease. Considering the adverse prognostic implications of autonomic neuropathy, the aim of the present study was to assess cardiovascular autonomic function in patients with liver cirrhosis and patients with hepatocellular carcinoma.

**Methods:** The study included 60 cirrhotic patients (13 females and 47 males with mean age  $53.5 \pm 7.6$  years), 40 patients with hepatocellular carcinoma (8 females and 32 males with mean age  $54.3 \pm 7.95$ ), and 20 age and sex matched healthy controls. Clinical examination beside laboratory and radiological investigations necessary for diagnosis were done. Cardiovascular autonomic function using the standard tests was examined in patients and controls. We studied the presence and extent of autonomic dysfunction in the patients in relation to clinical and laboratory characteristics.

**Results:** Compared to control subjects, both cirrhotics and hepatoma cases had impaired autonomic function tests, prolonged QTc ( $P < 0.001$ ) and higher autonomic function scores ( $P < 0.001$ ). HR response to deep breathing was impaired more in hepatoma group than in cirrhotics ( $P < 0.001$ ). 54 of cirrhotics (90%) and 37 of hepatoma patients (92.5%), had abnormal results of one or more autonomic function tests. No significant difference was found between cirrhosis and hepatoma groups as regard the distribution of autonomic dysfunction ( $P = 0.245$ ). Parasympathetic dysfunction was more prevalent than sympathetic one in cirrhosis

group (E:11.7% and D:41.7%, VS 36.7%) and also in hepatoma group (E:27.5% and D:32.5%, VS 32.5%). Cirrhotics with autonomic neuropathy had significantly higher rate of CV autonomic neuropathy symptoms ( $P=0.002$ ), higher rate of ascites ( $P<0.001$ ), lower BMI ( $P<0.001$ ), lower serum albumin ( $P<0.001$ ) and higher INR ( $P=0.008$ ) than those without neuropathy.

In patient groups, combined AD increased in frequency according to child class ( $P<0.001$  &  $<0.05$  respectively), also the abnormal autonomic tests were significantly related to child class, serum albumin and INR. We concluded that AD, mainly parasympathetic is present with comparable frequency in liver cirrhosis and hepatoma patients and is related to the severity of liver failure. So, the standard autonomic function tests should be used during evaluation of such cases, also HR response to DB may help in screening cirrhotics for hepatoma.

**Keyword:** autonomic function, liver cirrhosis, hepatocellular carcinoma.

**Abbreviation:** AD: Autonomic dysfunction; AFP: alpha fetoprotein; AN: Autonomic neuropathy; BMI: body mass index; CV: cardiovascular; D: definite; DB: deep breathing; DBP: diastolic blood pressure; E: early; FBS: fasting blood sugar; HCC: hepatocellular carcinoma; HR: heart rate; HR LS: heart rate response to standing; HRV: heart rate variability; M+SD: mean+standard deviation; PH: postural hypotension; PPS: postprandial sugar; QTc: Corrected QT interval; SBP: systolic blood pressure; VR: Valsalva ratio.

## **SAFETY AND TOLERABILITY OF COLD ADAPTED INFLUENZA VIRUS VACCINE AMONG SCHOOL AGE CHILDREN**

**Mohamed H. Kamel MD  
and Hussam El-Din Mostafa MD**

*Department of Chest, Benha Faculty of Medicine, Egypt.*

### **Abstract**

*Influenza infection can cause severe respiratory disease in high risk person such as those with asthma, but immunization rates for high risk group remain suboptimal. An investigational influenza virus vaccine, Trivalent, type A and type B, live, cold adapted (CAIV-T) administered By intranasal spray was shown previously to be effective in healthy adults and children.*

*Aim of the study: This study was carried out to assess the safety and tolerability of (CAIV-T). In subject 9 years of age and older in school age children with moderate to sever asthma.*

*Methods: Sample was double blinded Placebo controlled study, we did spirometry twice before vaccination to establish base line forced expiratory volume (FEVI) and two (2) to five (5) days thereafter.*

*The primary outcome index was the percent change in percent predicted FEVI before and after vaccination, Peak flows, Clinical Asthma Symptoms scores and night time awakening scores were measured daily from 7 days previous to 28 days post vaccination. Secondary out come index was including number of subjects with a decrease FEVI > 15% from base-line, reduction in peack flows > 15% below baseline, asthma exacerbation and Clinical Asthma Symptoms score before and after vaccination.*

*Results: The primary out come index (percent change in percent predicted FEVI) was not different :*

*Between the two group (Vaccinated and placebo groups)  $P = 0.78$ .*

*Secondary outcomes did not differ between the two groups (number of subject with decrease FEVI >15% from base line, reduction of PEFR >15% below base line, Clinical Asthma Symptoms scores before and after vacci-*

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*nation. No serious adverse event occurred.*

*Conclusion: CAIV-T was generally safe and well tolerated in children and adolescents with moderate to Severe Asthma.*

## **ETIOLOGY OF POSTERIOR REVERSIBLE ENCEPHALOPATHY SYNDROME (PRES)**

**Abdu Elnasr Muraad MD**

*Department of Neurology, Benha Faculty of Medicine,  
Benha University Egypt*

### **Abstract**

*Objective: To study the causes and risk factors for the development of Posterior Reversible Encephalopathy Syndrome (PRES).*

*Design: Prospective hospital based study over a period of three years from July 2001 to June 2004.*

*Patients and methods: Patients with clinical and neuroimaging features consistent with PRES were included in the study. All patients had detail clinical evaluation on presentation, and recovery from PRES. All had CT and/or MRI brain scan and other hematological and serological investigations to determine the most likely cause of the syndrome. Most patients also underwent follow up neuroimaging to demonstrate resolution of brain lesions.*

*Results: Thirteen patients fulfilled the clinical and radiological features consistent with PRES. Seizures and altered conscious level were most common clinical manifestations. Main radiological feature on CT and /or MRI brain was extensive subcortical edema mainly confined to the posterior parieto-occipital lobes. Hypertensive encephalopathy, immunosuppressive treatment, renal failure and eclampsia were main causes of PRES in our study. We also found that this syndrome was more common in females than males. Clinically all patients recovered with control of blood pressure and discontinuation or reduction in dose of the offending drug within 2-7 days. There was almost complete resolution of radiological abnormalities within 2-4 weeks in patients who underwent follow up imaging.*

*Conclusion: Hypertensive encephalopathy, immunosuppressive treatment, renal failure and eclampsia are most common causes of posterior reversible encephalopathy syndrome with a greater predilection for fe-*

Abdu Elnasr Muraad

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*males than males. Multiple factors may be contributory in some patients who develop PRES.*

## **CLINICAL PROFILE OF EPILEPSY DURING THE FIRST TWO YEARS OF LIFE**

**Abdu Elnasr Muraad MD**

*Department of Neurology, Benha Faculty of Medicine,  
Benha University Egypt*

### **Abstract**

*Objective: This study aims at identifying the different presentations of infantile epilepsy with their E.E.G. and neuro-radiological patterns.*

*Patient & Methods: Patients included in this study were children suffering from epilepsy starting below 2 years of age. They were attending the outpatient clinic or were from the in-patient departments in benha univesity hospital and other especial hospitals. The study included 100 children with ages ranging from three month to two years. All patients were subjected to: careful history taking, general and neurological examina&shy;tion including fundus examination, E.E.G. tracing, CT were done for all cases. Febrile convulsions and convulsions due to metabolic disturbances were excluded from the study.*

*Results: Patients were divided clinically into 2 groups: Group A (symptomatic) group-80 cases (80%): included those who had evident etiology, evident neurological deficit or developmental delay of significant degree prior to onset of seizures while Group B (cryptogenic) group-20 cases (20%). male to female ratio was 1.5: 1. The etiological factors encountered were perinatal asphyxia (55%) while heredofamilial disor&shy;ders were least common 44% of patients had normal clinical examination as well as development while 27 % were mentally handicapped. The generalized tonic-clonic seizure was the commonest in both group while infantile type was the least, EEG was normal in 18 % of cases while CT scan lesion were present in 70% of the patients.*

*Conclusions: Careful history taking is extremely important for accurate diagnosis of epilepsy. The in&shy;vestigation of choice is the E.E.G. Computerized tomography should be considered an accurate neurodiagnostic test. It provides a good anatomic descri&shy;ption of the brain.*

**OUTCOME OF EXTRACORPOREAL SHOCK  
WAVE LITHOTRIPSY:  
A Comparative Study of Different Shockwave  
Rates for Renal Stone**

**Osama Abd Wahab MD, Aly El-Shazly MD,  
Magdy A. Al Tabey MD and Alaa A. Hussen MD, FEBU**

*From Urology Department, Banha University, Banha, and  
Ahmed Maher Teaching Hospital, Cairo, Egypt.*

**Abstract**

*Objectives: Extracorporeal Shock Wave Lithotripsy (ESWL) had made a revolution in the treatment of renal urolithiasis. It is a safe procedure with a lower morbidity than open or percutaneous surgery for renal urolithiasis. There are no agreed-on standards among lithotripsy manufacturers about how to quantify the power and efficiency of lithotriptors, a problem further compounded by the lack of knowledge of the number and rate of shock waves that can be safely administered to kidney during any single ESWL sessions. So, we will compare the different rates of shock waves and their efficiency on fragmentation of renal stones.*

*Materials and Methods: A total of 280 patients were prospectively randomized to ESWL treatment of solitary renal stones; including 150 patients to 60 shocks per minute and 130 patients to 120 shocks per minute. The 2 groups were comparable and followed for 3 months. The success rate defined as stone-free status or asymptomatic residuals expected to pass spontaneously was recorded.*

*Results: In comparison of the 2 groups, they were comparable for baseline characteristics. Regarding the success rate, it was higher for 60 shocks per minute group (88.4% vs. 77%). Patients with stone 1-2 cm. experienced a higher success rate with 60 shocks per minute (81.1% vs. 50%) with fewer number of shocks and longer time for 60 shocks per minute (2510±740 vs. 2920±430) and (40.5±9 vs. 26.5 ±12 minutes) respectively.*

*Conclusions: The slow rate of ESWL at 60 shocks per minute is associated with a significant higher success rate especially for larger stones with lower number of shock waves compared to 120 shocks per minute.*

**GUILLAIN-BARRE` SYNDROME IN AGED  
PATIENTS CLINICAL, ELECTROPHYSIOLOGICAL,  
AND THERAPEUTIC OUTCOME**

**Abd Al-Nasser Murad MD, Maged Kamal MD,  
Khaled Sallam MD and Abo Zied Abdullah MD**

*Neuropsychiatry Dept. Benha Faculty of Medicine ,Benha university, Egypt*

**Abstract**

*Objectives : The aim of this study is to describe the clinical and electrophysiological and therapeutic outcome of those patients with Geriatric guillain-Barre` syndrome*

*Patients & Methods: Guillain -Barre` syndrome in patients older than 60 years of age were collected and HUGES disability score was used to quantify neurological deficit and outcome after therapeutic trials .*

*Results : 18 patients were included at this study with a mean age of 64,8 years. 80 % of them was found to have sensory - motor deficit. Evidence of demyelination was found in 8 subjects and axonal deficit was found in another 6 subjects there were only one with Miller-Fisher syndrome and 3 unclassified Plasmapheresis was carried out to 12 patients and (IVIg) in 2 patients . No significant difference between the two groups as regarding disability score before treatment .no significant difference in outcome in both groups after treatment .*

*Conclusion : Axonal GBS are more frequent in elderly and this may have a prognostic clue. plasmapheresis and IVIg treatments have no significant difference in outcome but with more complications at plasmapheresis than IVIg.*

## **DIAGNOSTIC AND PROGNOSTIC UTILITY OF FLOW CYTOMETRIC DNA MEASUREMENTS IN SOLITARY THYROID NODULE**

**Atif M. Abd El-Latif MD, Tarek I. Mahdy MD,  
Mokhtar F. Abu El-Hoda MD, Ahmed E. Loutfy M.Sc.  
and Nawal A. Gareeb MD\***

*Department Of General Surgery, Endocrine Surgery Unit, Clinical pathology\*,  
Mansoura University Hospital, Mansoura Faculty of Medicine, Egypt*

### **Abstract**

*Objectives: to define the value of DNA ploidy in the management of solitary thyroid nodule. Patients and methods: 50 patients were subjected to FNAB and flow cytometric DNA measurements and managed according to the results by either hemithyroidectomy or total thyroidectomy. Results: DNA aneuploidy was found to be more common in patients with thyroid carcinoma. DNA flow cytometric measurements have decreased the percentage of false negative results of FNAB. DNA aneuploidy was found to be more common in males, old age, extrathyroid extension, poor histological differentiation and metastasis. Also DNA aneuploidy was associated with recurrence and poor 2 years' survival. Conclusion: DNA flow cytometry plays an important role in the diagnosis of thyroid nodules especially in suspicious and unsatisfactory samples. Cases with diploid DNA histogram associated with high proliferative index values are well going toward malignancy. Patients with aneuploid differentiated thyroid tumors have poorer prognosis compared with patients with diploid tumors. So DNA pattern of FNAB can be used in the diagnosis and the prognosis of patients with thyroid carcinoma.*

## **SERUM CORTISOL AND ALDOSTERONE LEVELS IN CHILDREN WITH SEPSIS**

**Mohammed A.El-Bayoumi MD\*, Joseph Britto MD  
and Mohildeen Chowdhury MRCPCH**

*Departments of Paediatrics, Faculty of Medicine, Mansoura, Egypt\*  
and Paediatric Intensive Care Unit, St. Mary's Hospital, London, UK*

### **Abstract**

*BACKGROUND: Adrenal insufficiency has been documented in critically ill adults and in children with meningococcal disease. Use of corticosteroids is gaining more popularity in adults with sepsis and septic shock with no clear guidelines for their use in children.*

*OBJECTIVE: To evaluate serum levels of cortisol and aldosterone in children with sepsis and septic shock, and to evaluate association of these levels with fluid bolus requirement, inotrope requirements, and mortality.*

*DESIGN: prospective investigational study conducted on children admitted to the twelve-bed paediatric intensive care unit at St. Mary's Hospital, London, UK.*

*PATIENTS AND METHODS: Nineteen children with sepsis and septic shock, excluding those with meningococcal disease, were enrolled (group A). Twenty three children with illnesses other than sepsis (group B) were considered as a control group. The two groups were matched for severity of illness by PRISM-III score. Adrenal function was assessed by basal serum levels of cortisol and aldosterone. Data collected also included blood levels of potassium, sodium, osmolarity, and glucose on admission; level of inotrope support; amount of fluid boluses; and outcome.*

*RESULTS: Children in group (A) had lower cortisol and aldosterone levels than those in group (B). Lower serum cortisol in group A was associated with higher fluid and inotrope requirement. Serum cortisol levels were lower in non survivors without statistical significance. Serum aldosterone levels were significantly lower in children with higher risk of mortality.*

*CONCLUSION: Depressed adrenal function is associated with higher*

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*morbidity and mortality in children with sepsis and septic shock. Higher fluid and inotrope requirement may define the subset of patients with potential benefit from corticosteroid replacement.*

**HYPNOTIC EFFECT OF PERIOPERATIVE  
EXOGENOUS MELATONIN SUPPLEMENTATION  
IN ADULT PATIENTS UNDERGOING  
MAJOR SURGERY**

**Ashraf F. Aboushady MD, Tarek M. Bader MD  
and Amr A. Keera MD**

*Department of Anaesthesiology, Benha faculty of Medicine  
Benha University, Egypt*

**Abstract**

*We have evaluated the hypnotic effect of perioperative sublingual melatonin administration in 50 adult patients undergoing major surgery in a prospective, randomized, double blind, placebo-controlled study. 25 patients were given sublingual melatonin and 25 patients were given saline, approximately 100 minutes before a standard anaesthetic and again at 23:00 hours on the day of the operation and on the following day. Sedation and anxiety were quantified before, and 10, 30, 60, and 90 min after premedication, and 15, 30, 60, and 90 min after admission to the recovery room. Blood samples were taken for evaluation of melatonin and stress hormones "cortisol and epinephrine" concentrations. On the 3rd day postoperatively, patients were asked about satisfaction with the premedication, sleep disruption and any of the suspected side effects of melatonin. Patients who received melatonin had a significant decrease in anxiety levels and increase in levels of sedation before operation compared with controls. Melatonin was effective in decreasing perioperative levels of cortisol and epinephrine compared to placebo. Patients in the placebo group had a decreased nocturnal secretion of melatonin during the first 48 hours postoperatively while patients received melatonin had a better circadian rhythm. Patients received melatonin were more satisfied with premedication without significant differences in the side effects as compared to placebo. It can be concluded that melatonin can be used safely and effectively for premedication and postoperatively as a hypnotic in patients undergoing major surgery.*

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**THE EFFECT OF EPIDURAL FENTANYL ALONE,  
OR, IN ADJUVANT COMBINATION WITH  
CLONIDINE, NEOSTIGMINE OR BOTH  
FOR EPIDURAL LABOR ANALGESIA**

**Ashraf F. Abou Shady MD**

*Department of Anaesthesia & ICU*

*Benha Faculty of Medicine, Benha University, Egypt.*

**Abstract**

*In this study, we evaluated the efficacy and safety of an epidural single dose of fentanyl alone, or, in combination with clonidine, or, and neostigmine to provide selective and balanced analgesia during first stage of labor. Eighty healthy parturients were randomly allocated to receive, after a test dose, a single epidural injection of either 125 ug fentanyl, 50 ug fentanyl plus 75 ug clonidine, 50 ug fentanyl plus 500 ug neostigmine, or a combination of epidural 50 ug fentanyl plus 75 ug clonidine and 500 ug neostigmine was given in a total volume of 12 ml. Pain score, onset and duration of analgesia were determined. Maternal and fetal vital parameters as well as side effects were closely monitored. We found that a combination of epidural fentanyl 50 ug with 75 ug clonidine, or, 500 ug neostigmine, produced effective analgesia in 50% of parturients within 10 min and in 60% within 20 min with average duration of 105 & 121 min respectively. But whom received 125 ug fentanyl alone had delayed onset of analgesia "10% of parturients within 10 min and 50% within 20 min" with shorter duration of analgesia "average 87.6 min". However, combination of epidural 50 ug fentanyl with 75 ug clonidine and 500 ug neostigmine had resulted in rapid onset of analgesia "50% of parturients within 10 min and in 75% within 20 min" with average duration of analgesia 123.9 min. We also found that with any combination of the studied drugs, there was ropivacaine sparing effect and no motor block was observed. Maternal sedation in 25% of parturients received epidural 125 ug fentanyl. Maternal hypotension in 25% of parturients received fentanyl*

*and clonidine. However, we observed that epidural neostigmine counteracts hypotension induced by epidural clonidine. Nausea and vomiting were not significantly higher between parturients received epidural neostigmine in comparison with whom did not. No adverse effects had been seen on the fetus and fetal vital parameters remained stable during labor in all of the studied groups.*

## **RETROGRADE APPROACH TO THE FACIAL NERVE IN PAROTID GLAND SURGERY**

**Hamid El-Sherbiny MD, Ahmed Hamid MD\*  
and Saadia Shalaby MD\*\***

*ENT, Surgery\* and Anatomy\*\* Departments,  
Benha Faculty of Medicine, Zagazig University, Egypt.*

### **Abstract**

*The temporal branch of the facial nerve was examined in 8 cadaver dissections (4 right & 4 left). A number of rami crossing the zygomatic arch and their location with respect to bone and soft-tissue landmarks were estimated. The temporal branch course follows a constant plane along the under surface of the temporoparietal fascia and it was found to be superficial as it crosses the zygomatic arch. Based on these relationships, a safe method of dissection within the temporal region was formulated. In five cases with retromandibular parotid neoplasms, the seventh cranial nerve was located through a retrograde exploration of its temporal branch. The decision to resort to the identification of the temporal branch is supported by its adequate calibre in its peripheral area, short course, and multiple rami crossing the zygomatic arch, which enable it to be easily located.*

*Retrograde or centripetal approach to facial nerve has been found to be anatomically sound, simple to use and safe. It must be indicated when anterograde exploration is difficult.*

## **SENSORINEURAL HEARING LOSS AND MIDDLE EAR INVOLVEMENT IN PATIENTS WITH RHEUMATOID ARTHRITIS**

**Ahmed S. Elkady MD, Abubakr E. Ras MD,  
Hosam Abd Elazem MD, Sobhey Abo Elfetoh MD  
and Aly I. Fouda MD\***

*Departments of Otorhinolaryngology and Rheumatology and Rehabilitation\*,  
Faculty of medicine, Benha University. Egypt*

### **Abstract**

*Hearing impairment in rheumatoid arthritis has been shown by several studies. Some studies showed the sensorineural nature of hearing loss denoting inner ear affection while others showed conductive hearing loss denoting middle ear affection.*

*The aim of this study was to assess the affection of the Auditory Function in relation to rheumatoid arthritis and its relation to the activity of the disease. This study was conducted upon two groups: study group and control group. The study group included 50 patients with rheumatoid arthritis and normal ear, drum and middle ear by clinical examination, cases treated by ototoxic drugs were excluded from the study. The study group subdivided into active and inactive group and control group included 26 patients free from rheumatoid and hearing loss.*

*The study showed 22% (22 ears) from the study group had SNHL and 6% (6 ears) had mixed hearing loss. Conductive deafness not detected in any case of study groups.*

*The results of ABR, SISI, tone decay and WDS showed that the lesion most probably occur in cochlea.*

*The study showed some cases with ossicular loosening and others with Stiffness. There is no difference Between RF +ve and RF-ve, also active rheumatoid and inactive regarding to hearing loss.*

*The cause of hearing loss lies among 3 causes: ototoxic drugs used in the treatment of rheumatoid arthritis, alteration of ossicular mechanism*

*and vasculitis of the cochlea. Cases treated by ototoxic drugs were excluded from the study, so the cause lie between the remainder two causes. Further histopathological studies are needed to explore the changes in the interossicular joints and to confirm the true nature of inner ear involvement.*

## **SOLUBLE FAS/FASL SERUM LEVELS AS POSSIBLE DIAGNOSTIC BIOMARKERS OF CANCER BREAST**

**Zohdi Mahdi MD, Mahasen Abd El-Sattar MD,  
Ahmed Shawki MD\*, Abd El-Latif El-Balshy MD\*\*  
and Nagla Azab MD**

*Departments of Medical Biochemistry, General surgery\* and Pathology\*\*  
Benha Faculty of Medicine, Benha university, Egypt.*

### **Abstract**

*This work aimed to investigate the biochemical changes of serum sFas/sFasL system and its usefulness as an apoptogenic marker in patients with cancer breast, as a trial to approach serum biomarker which may be of value in early diagnosis and screening of patients with cancer breast. Forty patients non pregnant, non lactating females were categorized into 20 patients with breast cancer (BC), subclassified according to the clinical and mammographic staging and TNM classification into BC<sub>1</sub> (13 patients) with T<sub>1</sub>N<sub>0</sub>M<sub>0</sub> lesion, and BC<sub>2</sub> (7 patients) with T<sub>2</sub>N<sub>0</sub>M<sub>0</sub> lesion. Twenty patients with benign breast lesions subclassified into (12 patients) with fibroadenoma (FA<sub>1</sub>) and (8 patients) with fibroadenosis (FA<sub>2</sub>). Another, 20 healthy females with matched age, served as control. This study revealed a significant increase in the preoperative serum sFas/CD95 and sFasL in BC<sub>1</sub> and BC<sub>2</sub> compared to both control and benign breast lesions. While the postoperative serum sFas and sFasL in BC<sub>1</sub> and BC<sub>2</sub> were significantly decreased than the preoperative levels but still significantly higher than the control level. Furthermore, this study showed in BC group the preoperative serum sFas and sFasL were significantly positively correlated with the nodal involvement. Also, serum sFasL in BC group showed significant positive correlation with the lesion diameter. But, serum sFas showed non significant correlation with lesion diameter. As regard benign breast lesions, there was non significant increase in both serum sFas and sFasL compared to control group. We*

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*could conclude that the biochemical changes in serum sFas and sFasL may be considered useful tool as an apoptogenic marker in breast cancer.*

## URETEROSCOPIC TREATMENT OF URETERAL STONES: TO STENT OR NOT TO STENT?

**Sultan M. Sultan MD**

*Department of Urology, Minoufiya University, Egypt.*

### **Abstract**

**Introduction and aim of the work:** For many years, the routine placement of ureteral stents has been considered the standard of care after uncomplicated ureteroscopy for stone treatment. Recently, however, numerous studies have questioned the routine use of stents. The purpose of this study is to evaluate the outcome of uncomplicated ureteroscopy with placement of a stent, placement of ureteric catheter and without stent.

**Patients and methods:** Sixty five patients presented with ureteric stones in the period between June 2003 and December 2004 was treated by ureteroscopy. The patients were randomly divided into three groups. Group A (25 patients) received DJ ureteric stent number 6 French at the end of the procedure, group B (20 patients), a ureteric catheter number 5 French was left inside the ureter, and group C (20 patients), neither a stent nor a ureteric catheter was placed in the ureter. There were 23 males and 2 females in group A with mean age of (33.5±10.4 year). In group B, there were 19 males and one female with mean age of (35.3±9.6 year). There were 20 males in group C with mean age of (33.4±10.5 years). The outcomes measured were stone free rate, operative time, post-operative pain, hospital stay, lower urinary tract symptoms and late post-operative complications.

**Results:** There was no significant difference between the three groups regarding the age, gender, stone site and stone size. The operative time was significantly longer in group A than the other two groups with a mean of 41.8±9.6 minutes, 34.7±8.7 minutes and 32.4±10.1 minutes successfully ( $p < 0.05$ ). Pain score at days 3, 7 and 21 was comparable in the three groups ( $p > 0.05$ ). There was no significant difference between the three groups in hospital stay ( $p > 0.05$ ). The hospital time was 17.4±3.8

hours,  $16.6 \pm 4.3$  hours and  $16.3 \pm 4.2$  hours in the three groups successfully. Lower urinary tract symptoms were more prevalent in the stented group A than the other two groups. No cases developed ureteric stricture after 3 months in all groups.

**Conclusions:** Routine placement of ureteric stent or ureteric catheter after uncomplicated ureteroscopic treatment of ureteric stones has no advantages over non stenting procedures.

**Key words:** ureteroscopy, ureter, stones, stent, ureteric catheter, pain, lower urinary tract symptoms.

## **REVISION TRIANGULAR FLAP REPAIR FOR UNILATERAL CLEFT LIP**

**Mamdouh K. Afifi MD\* and Atef Abd El-Ghani MD\*\***

*\*ENT. Hearing and speech institute, \*\*General surgery,  
Assistant Professor of surgery, Banha University, Egypt*

### **Abstract**

*Twelve Children with a history of cleft lip, which was repaired previously by single triangular flap repair; were reoperated upon again due to unsatisfactory result of the primary repair. The cause of failure of the primary repair to achieve criteria for success was mainly due to failure of repair of the orbicularis oris muscle which must be recut & properly directed & resutured again in the revision operation together with scar revision and Z plasty repair for the skin.*

**A STUDY OF THE ASSOCIATION BETWEEN  
GASTRIC APOPTOSIS AND HELICOBACTER  
PYLORI (H. PYLORI) IN HEPATITIS C  
CIRRHOTIC PATIENTS**

**El-Sayed A. Wasfi MD, Ayman Al-Guindy MD,  
Ahmed K. Tawfik MD, Raafat A. Salah MD,  
Loai Mansour MD and Ahlam Abou-Elenein MD\***

*Departments of Tropical Medicine and Pathology\*,*

*Tanta University, Egypt*

**Abstract**

*Recent studies have suggested that bacterial coinfection with Helicobacter species in patients with hepatitis C virus (HCV) may increase the burden of both infections on the hepatobiliary and gastrointestinal tracts. The aim of this study was to evaluate the association between H. pylori infection and gastric apoptosis in patients with hepatitis C cirrhosis.*

*One hundred consecutive patients with dyspepsia; 50 with posthepatitis C cirrhosis and 50 without hepatitis C or cirrhosis, were studied. The presence of H. pylori was tested by urease test and Gram staining of gastric biopsies. The apoptotic index was calculated in gastric biopsies stained with hematoxylin and eosin. A statistical analysis was done to correlate H. pylori infection with gastric apoptosis in both groups. A verbal consent was taken from all patients after explaining the need for endoscopy and H. pylori testing to diagnose their illness.*

*The accuracy of rapid urease test and Gram staining was almost similar in detection of H. pylori.*

*The results of this study have shown that gastric apoptosis increased significantly in cirrhotic patients with H. pylori infection than non-cirrhotic patients with H. pylori infection. This increase was highly significant in comparison with cirrhotic and non-cirrhotic patients without H. pylori infection. Also, non-cirrhotic patients with H. pylori infection had significantly more gastric apoptosis than cirrhotic and non-cirrhotic patients without H. pylori infection.*

*On the other hand, no significant difference was found in gastric apoptosis between cirrhotic and non-cirrhotic patients without H. pylori infection.*

*In conclusion, H. pylori was associated with more gastric apoptosis. Hepatitis C cirrhosis increases gastric apoptosis in patients with H. pylori infection independent of the degree of cirrhosis and concomitant endoscopic findings including portal hypertensive gastropathy (PHG).*

*There was an association between H. pylori infection and gastric apoptosis specially in hepatitis C cirrhotic patients. This result warrants prospective studies to determine the possible interaction between H. pylori and HCV in increasing gastric lesions in patients with cirrhosis.*

**DETECTION OF HELICOBACTER GENUS AND  
HELICOBACTER PYLORI SPECIES IN GASTRIC  
FLUID FROM PATIENTS WITH NON-ULCER  
DYSPEPSIA USING A MULTIPLEX  
POLYMERASE CHAIN REACTION**

**Abul-fetouh E. Al-Enany MD, Ahmed M. Amin MD,  
Nadia M. Elwan MD\*, Ayman M. El-gendy MD\*,  
Ahmed K. Farrag MD\* and Raafat A. Salah MD\***

*Departments of Microbiology and Immunology,  
and Tropical medicine\*, faculty of Medicine, Tanta University, Egypt*

**Abstract**

*Helicobacter pylori (H. Pylori) is a human bacterial pathogen capable of surviving in the hostile environment of the stomach and duodenum. The bacterium has been linked to a number of gastric and extra gastric diseases. Recent reports of gastric infections caused by helicobacters other than H. Pylori created a clinical and research significance for a rapid, sensitive and specific diagnostic method. This is particularly important to make the laboratory-supported clinical diagnosis and follow up easier and specific. In this study, we used a multiplex PCR for the simultaneous detection and identification of Helicobacter genus and Helicobacter pylori in gastric fluid from patients with chronic non-ulcer dyspepsia. Patients with chronic dyspepsia of more than one month duration were recruited through the outpatient clinic in the university of Tanta hospital-Egypt for upper gastrointestinal endoscopy, only patients with no ulcer were involved in this study. Gastric fluid was obtained from 40 patients at the end of diagnostic upper gastrointestinal endoscopy, peripheral blood samples were also obtained and used to prepare serum for serodiagnosis. Gastric fluid was used for DNA preparation and inoculation of Skirrow's medium. Isolated pure colonies of H. pylori were used to prepare bacterial DNA to be used as positive control. Two pairs of primers; Hcom1, Hcom2 specific for Helicobacter genus, and Hicd1, Hicd2 specific for H. pylori species were used in the multiplex PCR. Two fragments of PCR*

*products of 389 bp and 1200 bp were obtained from 34 specimen (85%) using Hcom1-Hcom2 and Hicd1-Hicd2 primers respectively. In five specimens (12.5%) a single band corresponding to the genus-specific gene and not the species-specific gene was obtained. In one specimen (2.5%), no DNA amplification was obtained. No DNA amplification of the negative control Gram-positive or Gram-negative bacteria was detected. The detection limit of the assay used in this study was 0.04 pg of DNA. The results obtained from this study demonstrate that 85% of the symptomatic gastric helicobacter infections are due to helicobacter pylori. They also demonstrate that thie used protocol is a rapid, specific and sensitive assay for simultaneous detection of Helicobacter genus members and Helicobacter pylori species in gastric juice samples. This protocol reduces the number of PCR amplifications needed for specific diagnosis of the helicobacter infections. This can help physicians to have accurate and rapid diagnosis to cases of non ulcer dyspepsia, so that the right treatment can be precisely planned.*

*Keywords: Helicobacter, Helicobacter pylori, Multiplex PCR*

**PARATHYROIDECTOMY FOR PATIENTS WITH  
TERTIARY HYPERPARATHYROIDISM  
(MANSOURA EXPERIENCES)**

**Tarek Mahdy MD, Hesham Abdel Moneim MD,  
Tamer Youssif MD, Yasser Ali MD  
and Atif Abdel Latif MD**

*Department of Endocrine Surgery Unit,  
Mansoura Faculty of medicine, Mansoura ,Egypt*

**Abstract**

*Objective: The aim of this work was to study the effect of parathyroidectomy on patients with tertiary hyperparathyroidism, and to determine whether patients with tertiary hyperparathyroidism due to single- or two-gland disease undergoing limited resection have similar outcomes compared with patients with hyperplasia undergoing subtotal parathyroidectomy.*

*Patients and methods: A total number of 15 patients with manifestations of tertiary hyperparathyroidism underwent parathyroidectomy, where patients with adenoma(s) of parathyroid gland underwent excision of only the adenoma(s), and patients with hyperplasia of parathyroid gland underwent subtotal parathyroidectomy.*

*Results: There were significant changes in both clinical and laboratory values between pre- and post operative measures in both types of patients (adenoma and hyperplasia). This was proved by the significant decrease in serum calcium, serum alkaline phosphatase and parathyroid hormone as well as the great clinical improvement in the preoperative manifestations.*

*Conclusion: From this study we can conclude that the optimal treatment of tertiary hyperparathyroidism is surgical excision of adenoma(s) in patients with parathyroid adenoma(s) or subtotal parathyroidectomy in patients with hyperplasia of parathyroid gland.*