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### CARDIOPULMONARY COMPROMISE DURING AND AFTER GASTROINTESTINAL ENDOSCOPY

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### **Abstract**

**Background** / **Aim:** Although gastrointestinal endoscopy is a safe procedure, it is occasionally associated with complications especially in elderly patients or those having heart disease. We studied some cardio-pulmonary parameters during and after upper gastrointestinal endoscopy and colonoscopy in patients with and without heart disease in different age groups.

**Methods:** Ninety hospitalized patients with age range (46-94 years); all underwent endoscopy without premedications or conscious sedation. Patients were classified into three groups according to age and risk cardiac index. Electrocardiography with two leads (II, V5) was used; blood pressure and peripheral oxygen saturation (SpO2) were monitored throughout the procedure. Troponin t was evaluated before and 12 hours after the procedure. Relation between changes in cardiopulmonary parameters during and after endoscopy and cardiac function were analyzed.

**Results:** A significant fall was noted in SpO2 during the procedure in group II (92.12  $\pm$  3.4 ) and group III (91. 75  $\pm$  2.4) ( P= 0.001) whereas in group I (95 .34  $\pm$  1.1) no significant fall in SpO2 was noted from the baseline (P=0.63). A higher cardiac risk index was found in patients with oxygen desaturation than in patients without it (P<0.05). Atrial and ventricular premature beats found to be significantly higher in old patients and those had underlying heart disease. There is significant increase in systolic blood pressure during insertion of endoscope in all groups with no statistical difference between groups (P=0.5). ST changes were recorded in three patients with no significant ST level changes between patients with and without heart diseases. Silent ischemia was reported as elevated Troponin t in three patients. Duration of the procedure significantly cor-

related with oxygen desaturation.

**Conclusion:** Transient cardiopulmonary changes are not uncommon during upper and lower gastrointestinal endoscopy. Patients with ischemic heart disease, chronic pulmonary disease, advanced age, and those undergoing prolonged therapeutic procedures must be considered as high risk patients for the development of cardiopulmonary complications during gastrointestinal endoscopy. Routine use of electronic monitoring with pulse oximetry, ECG recording and blood pressure are important for detecting potentially important abnormalities in high risk groups.

# VALUE OF SCREENING COLONOSCOPY IN THE DIAGNOSIS OF EGYPTIAN PATIENTS WITH LOWER GASTROINTESTINAL SYMPTOMS

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University, and National Liver Institute\*, Menoufeya University, Egypt

### **Abstract**

Background and aims: Colorectal cancer is a major cause of mortality allover the world. Fecal occult blood testing, flexible sigmoidoscopy, and total colonoscopy are the most commonly recommended screening tests for colorectal cancer, yet screening rates are still below target levels. To fully realize the benefits of early detection of colorectal cancer, screening rates must be improved. The current study has been conducted to study the current pattern of colorectal lesions from endoscopic and histopathologic perspectives in relation to clinical and laboratory aspects in Egyptian patients with different lower gastrointestinal symptoms. Patients and Methods: 165 cases with different lower gastrointestinal symptoms presented to Gastroenterology and Endoscopy Unit, Specialized Medical Hospital, Mansoura University. Clinical, laboratory, colonoscopic and histopathological examination of colonoscopic samples were done during the period from October 2005 to July 2006. Results: The main lower gastrointestinal symptoms were abdominal pain, distension, altered bowel habits, dysentery and rectal bleeding. Ulcerative colitis represented 9.1% while colorectal carcinoma represented 4.1% of cases. Conclusions: The commonest symptoms and laboratory findings associated with colorectal carcinoma group were constitutional symptoms, constipation, rectal bleeding, fecal occult blood and iron-deficiency anemia. The colonoscopic examination is safe, accurate and cost-effective means of the screening for colorectal carcinoma.

**Key words:** Endoscopy, colorectal, pathology, diagnosis.

# T4 SYMPATHECTOMY FOR PALMAR HYPERHIDROSIS: LOOKING FOR THE RIGHT OPERATION

### Tarek Mahdy MD, Tamer Yuossif MD, Hesham Abd Elmonem MD, Waleed Omar MD and Atef Abd Elateef MD

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### **Abstract**

Most surgeons still perform T2 or T2-3 sympathectomy for palmar hyperhidrosis, but both these treatments can cause severe side effects. Some recent articles have advocated T4 sympathectomy and obtained satisfactory results. The aim of this study was to compare the outcomes of 3 different levels of sympathectomy. Between July 2003 and July 2006, we treated 60 patients (20 males and 40 females, mean age 26 years) suffering from palmar hyperhidrosis by Endoscopic thoracic sympathectomy (ETS). Patients were randomized into three groups according to the level of sympathectomy, ETS2, ETS3 and ETS4 groups (20 patients in each group). Data was collected by review of medical charts, outpatient clinic and telephone interviews. patients were asked to state whether they considered their symptoms to be cured', or unchanged'. The degree of hand dryness .Postoperative complications (including wound infection, was assessed chest pain, and Horner's syndrome) were assessed. Any occurrence of gustatory sweating, rhinitis, reflex (compensatory) sweating (CS), regions of CS and recurrence was noted. Patient satisfaction was assessed. Treatment success at follow-up was 90% for the ETS2, 95% for ETS3 patients and 100% for the ETS4 patients. In the ETS2 group and ETS3 group, a higher rate of over dryness of limbs was observed in 7 patients (35%), 4 patients (20%); respectively. The reflex sweating was mild in the ETS4 group, while moderate and severe reflex sweating were more common in the ETS2and ETS3 group patients. Around 40% of ETS2 groups and 25% of ETS3 group patients were unsatisfied with their surgery. All patients of ETS4 group were satisfied with the outcome of surgery. In con-

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clusion, ETS4 sympathectomy is an effective method for treating PH. The success rate is 100% and there is no recurrence. Most importantly, the rate of CS is reduced to a minimum.

# EFFECT OF LOCAL AND SYSTEMIC FENTANYL ON ROPIVACAINE-INDUCED SUPRACLAVICULAR BLOCK OF BRACHIAL PLEXUS

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#### **Abstract**

**Background** This prospective, randomized double blind study was designed to evaluate different effects of the addition of fentanyl to ropivacaine, on the analgesic profile after supraclavicular block of brachial plexus and to assess the hemodynamic effect and complications of this mixture in cases scheduled for elective upper limb orthopedic surgery at Mansoura University Hospitals.

Methods Forty five adult patients, ASA I-II, subjected for elective upper limb orthopedic surgery at Mansoura University Hospital were enrolled in this study. The patients were randomly assigned, using sealed envelope method, into 3 groups, each one consisted of 15 patients according to the mixture of anesthetic solution: ropivacaine group(R): received 30 ml 0.75% local ropivacaine + 2ml saline i.m, local fentanyl group (FL):received 30 ml  $\,$  0.75% local ropivacaine mixed with 1  $\mu g$  / kg fentanyl + 2 ml saline i.m and systemic fentanyl group (FS): received 30 ml 0.75% local ropivacaine and i.m 1 µg/kg fentanyl. The previously mentioned injectates were prepared in similar syringes by an Anesthetist other than the anesthesia provider. Parameters of brachial plexus blockade were recorded and included: Onset of sensory block, Onset of motor block, Postoperative analgesia duration and duration of anesthesia . Haemodynamic variables( heart rate and arterial blood pressure) and oxygen saturation were recorded. Intraoperative and postoperative complications as cardiovascular, respiratory or neurological disturbance were also recorded. Data were obtained and analyzed using statistica program .

**Results** In this study, we recorded no effect on the duration of anesthesia or the duration of postoperative analgesia after addition of perineural fentanyl. But, we recorded a delay in the onset of anesthesia which

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occurred only with perineural fentanyl. We did not record any cardiovascular, respiratory or neurological complications.

**Conclusion** As regards our conclusions concerning effect of adding 1  $\mu$ g /kg fentanyl to ropivacaine in supraclavicular brachial plexus blockade, we assumed that addition of perineural fentanyl was of no benefit as regards the duration, quality of anesthesia and postoperative analgesia.

Key words Bracheal plexus blockade, fentanyl, Ropivacaine.

# KONNO-RASTAN PROCEDURE WITH MECHANICAL PROSTHESIS IN DEALING WITH SMALL AORTIC ANNULUS: IS IT STILL A VIABLE SURGICAL OPTION?

### Wael A. Aziz MD

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### **Abstract**

**Background:** Konno-Rastan procedure is used to enlarge the aortic annulus and increase the size of the aortic valve implanted.

**Objective:** To evaluate the outcome of aortic annular augmentation by the Konno-Rastan aortoventriculoplasty procedure with aortic valve replacement, in congenital and acquired aortic lesions, in patients with small aortic annulus.

**Patients and Methods:** Between January 2003 and December 2006, 12 patients aged between 7 and 35 years (mean  $27.1 \pm 4.3$  years) underwent mechanical aortic valve replacement with enlargement of the aortic annulus using Konno-Rastan procedure, at El-Mansoura International Hospital. One (8.3%) patient underwent double-valve replacement, another one (8.3%) patient underwent redo double valve replacement and the remaining 10 patients (83.3%) had single aortic valve replacement. The main indication was a small aortic valve orifice area to patient body surface area (indexed valve area<0.85 cm2/m²). A teardrop-shaped Dacron patch is preferred for the annular enlargement to dilate supra-annular part of aorta. In a typical case, the aortic annulus was enlarged to twice its original size. The aortic prosthesis size was 19 mm in 9 patients, and 21 mm in three patients.

**Results:** Enlargement increased the aortic annulus from  $16.2 \pm 2.2$  mm to  $20.3 \pm 2.0$  mm (p <0.0001), as measured by echocardiography. The peak systolic gradient across the aortic valve decreased from  $73.6 \pm 22.3$  mmHg (preoperative) to  $35 \pm 10$  mmHg (p <0.0001) postoperatively. Hospital mortality rate (<30 days) was 8.3% (one patient). All survivors (Number = 11) had sinus rhythm after surgery except for one patient

who had temporary heart block improved on temporary pacemaker. All survivors were in NYHA functional class I - II on hospital discharge as well as throughout the whole postoperative follow-up period that extended for a mean time of 25  $\pm$  12 months.

**Conclusion:** Konno-aortoventriculoplasty is extremely effective in the treatment of small aortic annuli. Despite the promising use of various autograft and homograft operations in the present era, Konno-Rastan procedure should remain in the technical armamentarium of the cardiac surgeon.

**Keywords:** small aortic annulus - Konno-Rastan procedure - Aortic valve replacement.

# NODAL LEVEL AFFECTION IN ELECTIVE NECK DISSECTION FOR SQUAMOUS CELL CARCINOMA OF THE LARYNX

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### **Abstract**

The best prophylactic treatment for the NO neck is a subject of debate. Some authors propose lateral selective lymph node dissection (levels II-IV) for laryngeal squamous cell carcinoma (SCC) on the basis of probability of finding occult metastases in those lymph nodes. The necessity of routine dissection at level IV has been questioned. The purpose of this study was to find the incidence of level IV metastases in patients with transglottic and supraglottic SCC who underwent lateral neck dissection. We retrospectively evaluated 54 patients with NO supraglottic and transglottic SCC who underwent total laryngectomy and selective (level II-IV) neck dissection. Twelve patients (22.2%) had occult neck metastases, 3 of them had also contralateral occult positive nodes. Level IV involvement occurred only in one patient (1.85%) ipsilaterally who had also other positive ipsilateral nodes at level II-III. Extracapsular spread (ECS) occurred in 23.8% of positive nodes. Elective dissection of level IV in clinically NO supraglottic and transglottic SCC may be unnecessary and reserved for cases with highly suspicious involvement of level II-III nodes to avoid occasional morbidity associated with its dissection.

# THYROID SURGERY: USE OF LIGASURE VESSEL SEALING SYSTEM VERSUS CONVENTIONAL KNOT TYING METHOD

### Tamer Youssef MD, Tarek Mahdy MD, Hesham Abdul Moneim MD, Mokhtar Farid MD and Atif Abdul Latif MD

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### **Abstract**

**Objectives:** The aim of this study was to compare the use of conventional knot tying vs. LigaSure Vessel Sealing System (Valley lab, Boulder, Colorado) in patients undergoing thyroid surgery. We hypothesized that the use of LigaSure would reduce the time of operation without more complications. Patients and Methods: This study was conducted in Endocrine Surgery Unit, Mansoura University Hospital on patients who underwent thyroid surgery from January 1, 2006 to December 31, 2006. 110 patients were operated upon by the same team of surgeons using conventional knot tying in 55 and LigaSure in 55 patients for hemostasis. The medical records of patients enrolled regarding age, sex, histopathological diagnosis, type of operation performed (lobectomy vs. subtotal thyroidectomy vs. total thyroidectomy), the operation time, intraoperative blood loss, postoperative complications, length of incision, hospital stay and cost, as well as the postoperative pain and outcome were reviewed and compared. Results: The two groups had nearly similar demographic data. We have noticed that patients in the LigaSure™ group had significant lower operating times (P = 0.000), lower intraoperative blood loss (P= 0.000), less postoperative pain and early pain-free return to normal activity and return to work (P = 0.0001). **Conclusion:** LigaSure Vessel Sealing System was as safe as conventional knot tying method for thyroidectomy, with the benefit of a reduced operating time, decreased postoperative pain and early pain-free return to normal activity and return to work.

# RELATION BETWEEN T LYMPHOCYTES ACTIVITIES AND THE INTENSITY OF SCHISTOSOMA MANSONI INFECTION

## Hassan Rizk MD, Samia Hawas MD\*, El-Hadidy M. El-Hadidy MD, Hossam El-Nemr MD\*\* and Khaled Farid MD\*\*\*

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#### **Abstract**

This study was done on 60 schistosome patients and 12 cross matched healthy control persons. The schistosome patients were classified on the bases of intensity of infection into: 22 patients with light infection (one to 100 eggs/gm stool), 24 patients with moderate infection (101-400 eggs/gm stool), 14 patients with heavy infection (>400 eggs/gm stool).

All the studied cases were submitted to flow cytometric analysis of peripheral blood mononuclear cells using monoclonal antibodies against CD3, CD4, CD8, CD28, HLA-DR.

It was found that there was a significant decrease in CD3, CD4 and the expression of costimulatory molecule CD28 on CD8 T lymphocytes, while CD8 T lymphocytes and the activation marker HLA-DR expression on CD4 T lymphocytes were increased. These changes were more obvious with the increase in intensity of infection.

# MYRINGOPLASTY IN CHILDREN: PREDICTIVE VALUE OF PREOPERATIVE ASSESSMENT OF EUSTACHIAN TUBE FUNCTION

### Asser A. R. El-Sharkawy MD, Mohamed Y. El-Kotb MD, El-Sharaway Kamal MD, Akram Abdel Rahman MD\* and Mohsen Abdel Razek MD\*\*

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Banha University\*\*, Egypt

#### **Abstract**

**Objective:** Our aim was to determine the value of preoperative Eustachian tube (ET) function assessment in predicting the results of myringoplasties in children.

Patients and Methods: One hundred children suffering from inactive chronic suppurative otitis media were enrolled in this study. All children had undergone preoperative evaluation of the ET function using pressure equalizing test. Children were classified into three groups according to the ET function. The patients were operated at ORL Departments, Mansoura and Banha University hospitals between 2003 and 2006. Tympanic membrane perforations were reconstructed by autogenous temporalis fascia graft using underlay technique. Success was defined as no evidence of tympanic membrane perforation via otoscopic examination at the end of 6th month and air bone gap less than 20 dB.

**Results**: A success rate of 91.6 % in terms of graft uptake and hearing improvement of 95.4% was seen in good ET function, compared to 36.4% graft uptake and 62.5% hearing improvement in poor ET function.

**Conclusion:** This study revealed that preoperative assessment of ET function is an important factor when considering myringoplasty in children.

# SUB-TENON'S BLOCK IN CATARACT SURGERY A COMPARISON OF 2% ARTICAINE AND A MIXTURE OF 2% LIGNOCAINE AND 0.5% BUPIVACAINE

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### **Abstract**

Articaine is a novel amide local anaesthetic with a shorter duration of action than prilocaine. Sub-Tenon's anaesthesia arguably provides a safer method of anesthetic delivery for cataract surgery. In our study we compared 2% articaine with mixture of 2% lignocaine and 0.5% bupivacaine through sub-Tenon's block for cataract surgery. 60 ASA (American Society of Anesthesiologists) I-III patients were selected for comparison and allocated in two equal groups in randomized double-blinded study. We found that sub-Tenon's block using articaine 2% resulted in a more rapid onset of motor block than lidocaine / bupivacaine mixture (mean time to readiness for surgery was  $3.3 \pm 2.4$  (SD) min. in articaine group vs.  $5.1 \pm 3.2$  (SD) min. in lidocaine/bupivacaine group (p=0.0077). Ocular movement scores were significantly lower from 2 min. after injection until the end of surgery p = 0.021 ( $p \le 0.05$ )

We conclude that articaine 2% is safe and effective in sub-Tenon's block for cataract surgery and is a suitable and more convenient single drug alternative to the traditional mixture of 2% lignocaine and 0.5% bupivacaine.

# REHABILITATION OUTCOMES IN PATIENTS WITH SPINAL CORD INJURY: ONE YEAR FOLLOW UP

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### **Abstract**

**Objective:** There are many scales and methods for evaluation of spinal cord disability. Only few data are reported about the effect of either early or delayed rehabilitation programs. This study used a simple and reproducible index (Modified Barthel Index) to evaluate patients of spinal cord injury in different stages of their rehabilitation within one year.

**Methods:** Forty patients with spinal cord injury were evaluated in this study to find the functional outcomes from rehabilitation program using the 100-point modified Barthel Index (MBI). Also a comparative study was done between the functional outcome and the level of sensory and motor recovery using Sensory Index Score (SIS) and Motor Index Score (MIS). Twenty patients had spinal cord injury at the level of cervical spine (tetraplegic) and the other twenty patients were paraplegic (lumbar cord injury).

Serial clinical assessment was done at admission, one month, three months, six months and one year for muscle power, sensation, self care and mobility activities.

**Results:** For the tetraplegic patients, our results showed significant improvement in the self care subscore assessed after six months (P<0.005) and one year (P<0.05) of rehabilitation while the mobility subscore was insignificant in the first 6 months (P>0.05) and became significant after one year (P<0.02) of training program . The mean MIS showed insignificant improvement during the same period (P>0.05) while the

Mean SIS was significantly increased (P<0.05). A good positive correlation was found between MIS and SIS as well as between them and self care and mobility subscores.

The paraplegic patients showed a significant improvement in the self care subscore in the first six months and while the mobility subscore showed a significant increase during the total rehabilitation course (P<0.05), the mean MIS and SIS was insignificantly increased. Correlation studies found a good positive association between MIS and SIS as well as between them and the self care subscore but no correlation was found between the MIS and the mobility subscore.

Conclusion: In tetraplegic patients, improvement in self care started after 6 months, while mobility did not improve until 1 year of rehabilitation. Sensory scores improved significantly, but not mobility scores in those patients. Paraplegic patients had early mobility improvement, but the motor and sensory scores did not. Positive correlations were detected between MIS, SIS, self care and mobility in tetraplegics and the same was found in paraplegic patients with the exception of mobility subscores.

## MODERATE SEDATION WITH MIDAZOLAM- KETAMINE VERSUS PROPOFOL-KETAMINE FOR BONE MARROW BIOPSY

### Ola Taha A. Dayem MD, Hala M Salah El-Deen MD, Mohamed A. Ghanem MD and Hatem M. El-Emam MD

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### **Abstract**

Small- dose ketamine in combination with sedative drugs has increasingly been used for sedation and analgesia during local anaesthesia in outpatient procedure. This study compared the efficacy of sedation and analgesia of ketamine midazolam versus ketamine propofol combinations in bone marrow biopsy. Sixty patients of either sex undergoing bone marrow biopsy procedure under local anesthesia participated in this study. They were randomly allocated into two groups of 30 patients each, all received ketamine 0.5 mg/kg with either midazolam 0.05 mg/kg (KM group) or propofol 2.5 mg/kg (KP group). Supplementary dose of ketamine was administered to achieve adequate sedation level. Time to induce sedation, recovery oxygen time, saturation and adverse effects were recorded. The sedation levels were satisfactory in both groups except two patients in KM group and one in KP group. The most common side effects in KP group were pain on injection and hypoxia, where nausea and vomiting were the commonest side effects with KM group. Induction and recovery times were significantly shorter in KP group. Both combinations provided adequate sedation for bone marrow biopsy procedure but KP offer a quicker onset of sedation and a faster, smoother recovery.

**Key words:** ketamine, midazolam, propofol, moderate sedation, bone marrow biopsy.

# SURVIVAL AND RECURRENCE AFTER HEPATIC RESECTION IN CIRRHOTIC PATIENTS

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### **Abstract**

**Background:** Although hepatic resection is one of the most effective treatments for hepatocellular carcinoma (HCC), the long term results of hepatic resection of this malignancy are far from satisfactory. The potential benefits of hepatectomy for patients with HCC have not been fully delineated. This study aimed to identify surgical outcomes of 18 consecutive cirrhotic patients with HCC undergoing hepatic resection.

**Study Design:** 18 patients with cirrhotic liver underwent hepatic resection between March 2002 and January 2007. We had 14 men and 4 women. The mean age was 55 years with a range between 42 and 67 years.

**Results:** The 30-day (operative) mortality rate was one case (5.5%) and there was one additional late death (5.5%). Ten patients (62.5%) had recurrence after curative resection. Major hepatectomy was performed in 14 patients (77%) and the other 4 (22%) had minor hepatectomy In our study, the overall survival of patients after 3 years was 43.75 % while the disease-free survival was 37.5%.

**Conclusion:** The survival rate after operation remains unsatisfactory mainly because of the high recurrence rate. The improved care of cirrhotic patients, early detection and effective treatment of recurrent HCC may play an important role in achieving better prognosis and survival after operation.

# ASSESSMENT OF ESOPHAGEAL MOTILITY DISORDERS IN CHRONIC RENAL FAILURE

## Sherif Negm MD, Medhat Elsahhar MD, Mostafa El-Kady MD\*, Hisham Abdelrasek MD and El-Sayed Kaaod MD

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### **Abstract**

In patients with chronic renal failure (CRF) anorexia, nausea, and vomiting are common yet poorly understood symptoms. The study aimed to examine motor function disturbances of the esophagus as well as modulating hormonal factors and its effect on nutritional status in patients with (CRF) .We studied 50 patients stratified into 3 groups: G1: 25 patients with (CRF), on hemodialysis, G2: 25 patients with (CRF), on conservative treatment and G3: ten subjects with abnormal upper GI. manifestations, but with normal renal functions. S. gastrin and S. albumin were examined in all groups and esophageal manometric assay was done for all. At presentation G1: showed the presence of elevated lower esophageal sphincter pressure and incomplete lower sphincter relaxation with elevated residual pressure on relaxation associated with low percentage of relaxation on wet swallows. In addition to a high amplitude and prolonged duration of esophageal contractions as compared to G3, this was associated with hypergastrinemia and low S. albumin. Moreover G2: showed the same results as for G1, plus a high percentage of uncoordinated contractions as compared to G3, but it lacks high amplitude and prolonged duration of esophageal contractions . We conclude that esophageal motility abnormalities and elevated serum gastrin may be a consequence of (CRF), in addition, elevated serum gastrin may play an important role in initiating these abnormalities and that esophageal manometry should thus be considered for patients with CRF presenting with gastrointestinal upsets.

# EVALUATION OF PLASMA ADIPONECTIN LEVEL IN PATIENTS WITH NONALCOHOLIC FATTY LIVER DISEASE

# Fatma Abd El-Salam MD, Mostafa El-Kady MD, Mahasen Abd El-Satar Ph.D\*, Intesar ELsharkawy MD, Reda El-Badawy MD and Yaser Shaheen MD

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### **Abstract**

Nonalcoholic fatty liver disease is an increasingly recognized condition that may progress to end stage liver disease; the aim was to study the level of plasma adiponectin in patients with nonalcoholic fatty liver with DM, and chronic hepatitis C in comparison with a control group.

**Methods:** The study was conducted on 60 individuals, 37 males & 23 females, their age ranged from 26 to 74 Ys, they were categorized into 3 groups: G 1: 20 apparently healthy individual serving as a control group, G2: 20 patients with type 2 DM and fatty liver, G 3: 20 patients with chronic hepatitis C and fatty liver. All cases underwent full clinical examination & laboratory investigations, including (CBC), (ESR), liver & kidney-function tests fasting & 2 hours PP blood glucose, lipograms, Polymerase chain reaction (PCR) for HCV-RNA in addition to abdominal ultrasonography and estimation of serum adiponectin level by ELISA technique.

**Results:** a significantly decreased plasma adiponectin levels were found in patients with fatty liver disease when compared to the control group. In addition, plasma adiponectin in group 2 (DM) show significant positive correlation with fasting blood glucose level (r = -52, p < 0.05). However plasma adiponectin levels, were significantly lower in group 3 (HCV) than in the other groups. A significant lower adiponectin levels was observed in male in all groups, further more plasma adiponectin in group 3 (HCV) show significant spositive correlation with blood urea (r = 0.48, p < 0.05) and HDL level (r = 0.49, p < 0.05).

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<b>Conclusion:</b> plasma adiponectin level is decreased in patients with NAFLD with type2 DM &chronic HCV and may suggest fat accumulation in the liver.

## CLOSED REDUCTION AND PERCUTANEOUS FIXATION OF THE PROXIMAL TIBIAL EPIPHYSEAL FRACTURES

### Mahmoud I. El-Hadidi MD

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### **Abstract**

Displaced Salter-Harris type III and type IV fractures involving proximal tibial epiphysis can be serious injuries. If the correct treatment is applied, growth disturbances following these fractures are rare. In this study 6 patients with displaced Salter-Harris type III and IV of the proximal tibial epiphysis were treated by closed reduction and percutaneous screw fixation. There were 5 boys and one girl with an average age of 12 years. Three of the fractures were type III and three were type IV. The duration of follow-up ranged between 9 to 30 months. Based on clinical and radiographic criteria, 5 children achieved excellent results (83.3%), and one child was graded as good (17.7%). We believe that, closed reduction and percutaneous screw fixation is a good method for treatment of displaced Salter-Harris type III and type IV fractures of the proximal tibial epiphysis, as it gives excellent results, allows rigid fixation without significant dissection to place the screws and it avoids the complications associated with open reduction including infection, skin sloughing and damage to the physis.

# NORMAL PARATHYROID HORMONE AMONG PATIENTS WITH UNEXPLAINED MYALGIA, DOES IT EXCLUDES VITAMIN D DEFICIENCY?

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### **Abstract**

Undiagnosed vitamin D deficiency is not uncommon. Serum PTH has been addressed as a biomarker that usually increase in case of low vitamin D. The present study aimed at evaluating the vitamin D status among patients with chronic unexplained myalgia considering the diagnostic help of secondary hyperparathyroidism as a surrogate marker . Results: Among 360 cases with unexplained myalgia 297 revealed secondary increase in serum PTH level . Among 63 cases with normal serum PTH 31 (49.21 %) cases showed vitamin D deficiency ( < 20 nmol / L ) & 30 (47.62 %) patients showed vitamin D insufficiency ( 20 - 63 nmol / L) and it was sufficient in 2 ( 3.17%) cases only. Conclusion: Exclusion of vitamin D inadequacy is a must in any case with chronic unexplained muscle pains. Secondary hyperparathyroidism though a good biomarker for vitamin D inadequacy , yet , the reverse is not true. So, still serum 25 (OH) D 3 level is the gold standard test to evaluate the vitamin D status of the patients.

# IS THEIR A ROLE FOR ORAL L-CARNITINE THERAPY IN ANEMIA AND CARDIAC DYSFUNCTION MANAGEMENT IN EGYPTIAN PATIENTS ON MAINTENANCE HEMODIALYSIS?

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#### **Abstract**

L-Carnitine is a short organic hydrosoluble molecule and is present in biological materials like free carnitine and acylcarnitines, which constitute the carnitine system. Long-term intermittent hemodialysis is associated with a reduction in plasma and tissue L-carnitine levels. Available studies on carnitine supplementation suggest the use of this molecule in dialysis, especially for those patients with cardiac complications, impaired exercise and functional capacities, and increased episodes of hypotension. Moreover, in some patients, the improved stability of erythrocyte membranes with L- carnitine supplementation may decrease erythropoietin requirements, thus, leading to a reduction of dialytic costs. To study if there a possible advantageous effects for L-Carnitine oral supplementation in anemia and cardiac dysfunction management in a cohort of Egyptian patients on maintenance hemodialysis. Methods: Fifty-five patients with chronic renal failure on maintenance hemodialysis were classified into 2 groups: L- Carnitine group: 20 patients (12 male and 8 female, Mean age 47.66±17.73 years, hemodialysis duration 51.36±18.14 months, subjected to three sessions /week reaching Kt/V of 1.48±0 .37) they received oral L-Carnitine therapy 1.500 mg/day and Control group: 35 patients (24 male and 11 female, mean age 37.9±14.7 years, hemodialysis duration 53.83±15.17 months, subjected to three sessions /week reaching Kt/V of 1.33±0.28). Both groups were on Erythropoietin therapy and IV iron whenever indicated. Echogardiographic studies were performed before and at the end of the study. Results: Serum hemoglobin were comparable in the L- carnitine group and control group at the start and six months after therapy (8.63±1.77 and  $9.39\pm2.02 \text{ gm/dl}$ , P= 0.18,  $10.49\pm1.60 \text{ and } 10.29\pm2.48 \text{ gm/dl}$  P= 0.76 respectively). The weekly maintenance dose of Erythropoietin inspite of being lower in L-Carnitine group (Mean =  $4750.12\pm2137.04$  units) compared to control group (Mean= 5515.15±2292.94 units) it does not reach a statistical significance (P=0.24). No significant improvement could be observed in echogardiographic findings in the L- Carnitine group after therapy. Conclusion: The role of L-Carnitine in hemodialysis patients is questionable. Our study revealed no observed significant improvement in echocardiographic findings 6 months after therapy. However, -a statistically non significant- reduction in Erythropoietin dose was achieved in the L- carnitine-treated compared to the control group while maintaining comparable target hemoglobin in both groups. Long-term studies including larger number of patients are required to clarify its role in hemodialysis patients.

# ULTRASOUND GUIDED CONTINUOUS FEMORAL NERVE SHEATH BLOCK VERSUS CONTINUOUS EPIDURAL ANALGESIA AFTER INTERNAL FIXATION OF FRACTURED NECK FEMUR

#### Atif A. El-Morsi Ghazi MD

Department of Anesthesia and Intensive Care. Faculty of Medicine. Benha University. Egypt

#### **Abstract**

Continuous peripheral nerve blocks provide extended, site specific post-operative analgesia with few side effects. Ultrasound guidance can significantly improve the quality of nerve blocks in almost all types of regional anesthesia. The aim of the present study is to compare continuous femoral sheath block, under ultrasound guidance, with continuous epidural analgesia in terms of analgesic efficacy at rest and during movement, complications, and patients satisfaction. Thirty five ASA physical statuses I to III patients scheduled for internal fixation of fracture neck femur under general anesthesia were included in this study. Patients were divided into two groups in a randomized fashion. During the first 48 h postoperatively, analgesia was provided by using continuous femoral nerve sheath block group A (GA) or continuous epidural analgesia group B (GB). The intensity of pain at rest and on movement was assessed by the patients using a visual analog scale (0 = no pain, 100 = worst possible pain)at 2, 4, 8 h and every 8 h for 48 h after the operation. If the VAS was  $\geq 3$ the patient could receive additional morphine 2 mg every five to ten minutes; up to 4-6 mg according to age and general condition of patient. Times of catheter insertion and difficulty were significantly high in GA, no vascular puncture happened during procedures in both groups. VAS at rest and on movement present no significant difference between the groups allover the time of study. Cumulative morphine dose over 48 h was not significantly different, but satisfaction was significantly high in GA. Pain at insertion site was high in GA compared to GB where it was 5 and 3 respectively. Local signs of infection present in 2 patients in GA, but no patient had local signs of infection in GB. Inadvertent catheter removal as well as kinked catheter was occurred in one patient in each group. Hypotension, urine retention and need of antiemetic were high in GB. We can concluded that, ultrasound guided continuous femoral nerve sheath block offers a technically easy and safe method, with faster onset and better quality, for providing post-operative analgesia in patients undergoing internal fixation of fractured neck femur. However, it must be done under strict and complete aseptic conditions to avoid local infection which can spread to form psoas abscess.

# POST-KIDNEY TRANSPLANT MALIGNANCY IN EGYPT HAS A UNIQUE PATTERN: A 3-DECADE EXPERIENCE

### Ahmed F. Donia MD\*, Amani Mostafa MD, Hoda Refaie MD, Mahmoud El-Baz MD, Mohamed M. Kamal MD and Mohamed A. Ghoneim MD

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### **Abstract**

The prevalence and type of post-transplant malignancy vary among different transplant units. We hereby report on our 30-year single center experience. Between March 1976 and January 2007, 1866 kidney transplantations were carried out (1390 males and 476 females, mean age = 29.84±10.47 years). Recipients who developed post-transplant malignancy (74 patients) were evaluated. Furthermore, characteristics of this group were compared to those of the malignancy-free recipients (1792 patients). Seventy four patients (3.97%) developed 76 malignancies. Kaposi sarcoma was the commonest type (36.8%). The majority of patients had cutaneous lesions and mortality was relatively low (10.7%). Skin/oral cancers were the 4th among post-transplant malignancies (9.2%). The majority of cases were basal cell carcinoma. In our series, two variables were identified as independent risk factors for the development of post-transplant malignancy: age and prior blood transfusion. In conclusion, posttransplant malignancy represents a continuous challenge for the outcome of kidney transplantation. Nevertheless, its prevalence and type vary due to many factors including environmental and genetic factors. In our series, Kaposi sarcoma was the commonest type dictating further evaluation of its preventive strategies and newer therapies.

# SUMATRIPTAN AND GABAPENTIN FOR TREATMENT OF POSTDURAL PUNCTURE HEADACHE

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#### **Abstract**

Postdural puncture headache (PDPH) is one of frequent adverse complication of dural puncture. Although, it is a self limiting and non-fatal condition, its postural nature prevents the patient from performing routine activity and may make them anxious and depressed. In this study we evaluate a combination of sumatriptan and gabapentin for treatment of PDPH and compare it with sumatriptan or gabapentin as sole medication. ASA I & II 45 patients age between 20 and 40 years and non-parturient, who's developed PDPH after spinal or epidural neuraxial block was included in the study. Patients were randomized to receive either gabapentin 300 mg orally every 8 hours for one week group I, in group II patient was received sumatriptan 50 mg orally once daily for 3 successive days. In group III, patients received sumatriptan 50 mg orally every day for 3 days and gabapentin 300 mg every 8 hours for 7 days. PDPH was evaluated by using Visual Analog Scale (VAS), measured 20 min after patients assumed upright postures either sitting or standing. It was recorded before start the treatment as baseline and at 12, 24, 36, 48, 72 and 96 hours after. Satisfaction of patients with treatment was asked, after 4 days. Complications such as somnolence, dizziness, seizures, chest pain, nausea, vomiting and dry mouth were recorded. VAS was significantly low and patient satisfaction was high in group III when compared with the other two groups. Number of patients reported somnolence and dizziness were significantly high in group III compared to group I or II. Combination of sumatriptan and gabapentin could be beneficial for treatment of patients with PDPH, more than sumatriptan or gabapentin alone, as it

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relief the headache and decrease usage of epidural blood patch which is invasive and not safe procedure.					

# THE EFFICACY AND OPTIMUM TIME OF ADMINISTRATION OF RANITIDINE (ZANTAC) HCL ON THE GASTRIC PH AND VOLUME IN ADULT PATIENTS UNDERGOING ELECTIVE SURGERY

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### **Abstract**

We examined the effect of single oral dose of ranitidine HCl (Zantac) 300 mg, administered 12 or 2 hours before elective surgery, on intragastric pH and volume. One hundred and twenty five adult inpatients of either sex, aged 20-40 years, ASA physical status I and II scheduled for elective surgery with general anesthesia, were randomly enrolled into three groups: Group A (control group) 41 inpatients, group B (oral Ranitidine administered 12 hrs preoperatively) 43 inpatients and group C (oral Ranitidine administered 2 hrs preoperatively) 42 inpatients. There was no statistically significant difference between the three Groups regarding age, sex, ASA physical status, weight, height, and body mass index (BMI). There was a statistically significant difference between group A vs group B and group A vs group C regarding pH (p <0.0001). The difference between group B and group C was not significant regarding pH (p > 0.05). The gastric secretion volume increased in group A more than in group B and C where there were a highly significant difference (p <0.0001) while the difference between group B and C was not significant (p > 0.05). The proportion of the patients considered" at risk" of significant lung injury should aspiration occur occur as there was a significant there was a statistically difference between group A vs B (P<0.001), group A vs C (P < 0.05) and no significant difference between group B vs C (p> 0.05). In conclusion: Oral Ranitidine HCl (Zantac) 300 mg administered twelve or two hours before elective surgery improves condition of

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gastric secretion at the time of induction of anesthesia, thus reducing the potential risk of pneumonitis, if the aspiration of gastric contents occur following the induction of anesthesia. Our results suggested that the twelve hours dose of ranitidine HCl (Zantac) decreased gastric acidity, secretion volume and numbers of patients at risk of aspiration better than two hours dose but without statistically significant difference.

## I.V. PARACETAMOL (PERFALGAN) INFUSION FOR POSTOPERATIVE ANALGESIA AFTER LAPAROSCOPIC CHOLECYSTECTOMY

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#### **Abstract**

The adequacy of postoperative laparoscopic cholecystectomy pain control is one of the most important factors in determining when a patient can be safely discharged from the outpatient facility. The purpose of this study was to compare the quality of analgesia and side effects of intravenous paracetamol (perfalgan) 1 q versus intravenous meperidine 100 mg for postoperative analgesia after ambulatory laparoscopic cholecystectomy. The study comprised eighty patients, ASA physical status I or II, age 20-60 years, undergoing elective cholecystectomy under general anesthesia at Benha University Hospital. Before the end of the operation and after removal of the gall bladder, patients were randomly allocated to one of two equal groups, (Group 1) patients received 1q/100ml I.V. paracetamol (Perfalgan) in 15 minutes and (Group 2) patients received 100 mg meperidine (pethidine) I.V. in 15 minutes. Most of the patients (72.5%) in paracetamol group had a VAS Score more than five at six hour after the operation. But in meperidine group (Group 2) the pain intensity increases after 15 minutes and made a peak level in the second hour after the operation. Patients with a VAS score more than five a rescue analgesic was given to the patient. The time to the first request for supplemental analgesia after injection of the study drugs was approximately three times longer in the paracetamol compared with meperidine. Total analgesic consumption 24 hours postoperatively was higher in meperidine group. 16 (40%) of patients in meperidine group (Group 2) were taken three doses of rescue analgesic but 12 (30%) of patients in paracetamol group (Group 1) take three doses of rescue analgesics. 10 (25%) patients in meperidine

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and 6 (15%) in paracetamol group had nausea. No respiratory depression, vertigo, ataxia, itching, somnolance and headache was observed .Conclusion: our results indicate that iv paracetamol 1g has better analgesic potency and less side effects than 100 mg meperidine for postoperative analgesia after ambulatory laparoscopic cholecystectomy.

#### INTRAVENOUS SEDATION PRIOR TO PERIBULBAR ANESTHESIA FOR CATARACT SURGERY IN ELDERLY PATIENTS

### Esam Makrum MD, Mohamed Samy Seddik MD and Ahmed El Amshaty MD

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

#### **Abstract**

Cataract surgery, a common operation in the elderly, is frequently performed under regional anesthesia. Dexmedetomidine, a sedativeanalgesic, is devoid of respiratory depressant effects. This study was to compare the effects of dexmedetomidine sedation with those of midazolam sedation in patients undergoing cataract surgery under peribulbar anesthesia and to assess if iv sedation (using dexmedetomidine or midazolam) prior to peribulbar anesthesia minimizes the pain or discomfort, when compared with placebo (saline). 60 patients were undergoing elective cataract surgeries under local anesthesia randomized into three equal groups to receive one of the following: dexmedetomidine Group D, midazolam Group M and saline Group S. Sedation was titrated to a Ramsay sedation score of 3. Mean arterial pressure (MAP), heart rate (HR), readiness for recovery room discharge (time to Aldrete score of 10), and patients' and surgeons' satisfaction (on a scale of 1-7) were determined. The three groups were similar in age, sex, ASA physical status and mean axial length of the globe. 10 minutes post block the MAP decreased in Group D compared to Group M and S where there was a highly significant difference (P < 0.01) (between Group D and M) and a Very highly significant difference (P < 0.0001) (between Group S and D). The heart rate also decreased in Group D compared to Group M and S where there was a significant difference (P < 0.01) (between Group D and M) and a *Very highly significant difference (P < 0.0001) (between Group S and D).* As regard SpO2 there was no significant difference between the Groups throughout the operation. There were no differences in HR between treatment groups in the recovery period; however, MAP was significantly lower throughout the period of recovery in the dexmedetomidine group. There was no difference between treatment groups in the time to achieve

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an Aldrete score of 10 and the time to eligibility for PACU discharge. In conclusion, this study demonstrates that iv dexmedetomidine or midazolam appears to be a suitable agent for sedation in patients undergoing cataract surgery, reduced the perception of pain associated with the performance of peribulbar anesthesia and attenuated haemodynamic responses. In the recovery room, dexmedetomidine was associated with an analgesia-sparing effect, slightly increased sedation, but no compromise of respiratory function or psychomotor responses.

### LOCAL ANESTHESIA WITH SEDATION FOR AMBULATORY ANORECTAL SURGERY

#### Esam Makrum MD, Ahmed El-Amshaty MD, Mohamed Samy Seddik MD and Gamal Saleh MD

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#### **Abstract**

Anorectal surgery is extremely painful and it is a challenge to the anesthetist and surgeon. Most patients are anxious about pain during and after the surgery. We tried in this study to solve this problem especially for patients who may have some problems with general anesthesia or contraindications to regional anesthesia. In this study our aim was to compare between the local anesthesia (which is not a common technique in our hospital), spinal anesthesia and general anesthesia for anorectal operations. We selected 87 patients for the study. The patients were allowed to choose between the three methods of anesthesia and then categorized according to their choice. 31 patients choose the local anesthesia and were categorized as (LA) group. 28 patients choose spinal anesthesia and were categorized as (SA) group. The third group was the general anesthesia (GA) group including 28 patients. Patient's satisfaction and intraoperative and postoperative VAS also reported. The operative time ranged from 23 to 55 (23  $\pm$  18) min in LA group and (25  $\pm$  12) in SA group, but in the GA group the operation time ranged from 20 to 40 min (20  $\pm$  10). There was no difference between LA group, SA group and GA group regarding the personal data (age, weight, and ASA I /II/III). The percent of female patients in the third group was more than that in the other two groups. The intraoperative pain scale in the in the LA & SA groups during the operation didn't exceed 3 form the start of operation till the end except only one patient in group LA who is shifted to general anesthesia as she was noncooperative and she asked for GA. Intraoperative pain scale more than 5 (3 & 2 patients) in the LA & SA groups during anal dilatation and early manipulations and intensity of pain decreased by time to pain scale less than 3. Five minutes after the end of operation, all patients received declofenaic sodium 75 mg IM. Twenty six patients in the GA start to complain of pain so pethidine 0.3mg /kg IV bolus dose followed by 0 .7 mg / kg pethidine IM to control pain. In spite of this six patients of the GA group started to complain of pain again after 90 min of the last dose of pethidine, VAS for these patients was more than 5. 87% of patients in the LA group didn't need any analgesic in PACU for 120 min. Three patients (11%) in SA group developed urinary retention. No patient in LA or GA group developed urinary retention. No surgical complication reported in the three groups.

Conclusion: Local anesthesia is more effective and more beneficial to the patients planned to have simple anorectal operations than general anesthesia. Local anesthesia is nearly as effective as the spinal anesthesia. It has the advantages of preemptive analgesia, early patient movements, and early return to the work, and fewer complications than GA.

#### EVALUATION OF DIAMOND VERSUS HOUSE ADVANCEMENT FLAPS IN TREATMENT OF POSTOPERATIVE ANAL STENOSIS

#### **Hesham Abdul Moneim MD**

Department Of Colo-Rectal Surgery Unit, Mansoura University Hospital.

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#### **Abstract**

Background: Cicatricial stenosis of the anal canal is a serious and disabling complication of anal surgery, which may be extremely difficult to manage. In surgical practice, there exists minimal consensus as to the most successful way to surgically manage patients with this condition. Different anoplasties have been described for the management of anal stenosis, such as mucosal advancement anoplasty, S-plasty, Y-V anoplasty, diamond-shaped flap anoplasty or house advancement flap anoplasty. All of which involve local tissue transfer of varying complexity. This comparative randomized study was performed to evaluate the efficacy, complication rate and recurrence of anal stenosis after diamond shaped pedicle flap versus house advancement pedicle flap in treatment of postoperative severe anal stenosis. **Methods:** In this study, we reported 17 patients with severe postoperative anal stenosis of mean duration  $16.9 \pm 7.7$  months. Their mean age was  $41.64 \pm 8.09$  years. Nine had bilateral diamond flap anoplasty and eight underwent bilateral house advancement flap anoplasty. All patients were seen 4 weeks, 6 months, one year and then annually after surgery. Results: At 4 weeks follow up, almost all patients showed complete healing of wounds and most of them reported satisfactory results. Only one patient with diamond flap anoplasty developed flap tip ischemia and wound dehiscence. Six months postoperatively, no further complications were observed. Anorectal manometric studies revealed within normal resting and squeezing pressures for all patients. At one-year follow-up, all patients who underwent house advancement flap had complete remission of the symptoms. Among the 9 patients who underwent diamond pedicle flap, 7 judged their clinical results satisfactory while 2 patients had restenosis.

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**Conclusions:** Although our cohort of patients is not huge, and randomized studies comparing the results of many different operative procedures used to correct anal stenosis are lacking in the literature, we can conclude that house advancement flap is simple and safe method to correct postoperative anal stenosis with good long term results.

## STUDY OF THE POSSIBLE OXIDATIVE EFFECT OF OVARIECTOMY ON BONE AND THE PROTECTIVE ROLE OF EXERCISE IN RATS

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#### **Abstract**

There is increasing evidence suggesting the role of free radicals in bone resorption and bone loss. Ovariectomized rats have been used as animal models for the study of osteoporosis. Oxidative stress due to reactive oxygen species (ROS) can cause oxidative damage to cells. Even though, there are studies suggesting the role of free radicals in bone loss, however, the preventive role of exercise on oxidative stress remains obscure.

The aim of the present study was to investigate the impact of ovariectomy (OVX) on bone and the possible effects of swim-training regimen on the bone turnover markers and oxidant/antioxidant system in adult rats.

The present study was carried out on thirty female albino rats classified into 2 groups. Group I (n=10) underwent sham operation, while group II (n=20) underwent bilateral Ovariectomy (OVX). Eight weeks after OVX, 10 rats of group 2 (group II a) were left for free cage movement while the other 10 rats (group II b) started to practice swim-training regimen for 1 hour daily, 5 days per week, for 7 weeks. Fifteen weeks from the start of the experiment, blood and urine samples were taken for estimation of biochemical markers of bone turnover [calcium, phosphorous, alkaline phosphatase (ALP), Osteocalcin (OC) and urinary deoxypyridinoline (DPD)]. Then, the rats were killed and the femora were removed. The bone tissue homogenates were used for the estimation of oxidant/antioxidant system markers [superoxide dismutase (SOD), glutathione peroxidase (GPx), malondialdehyde (MDA) and hydrogen peroxide (H2O2)].

The results showed that OVX induced bone oxidative stress with in-

creased levels of MDA and H2O2 associated with decreased activity of SOD and GPx significantly when compared to control sham-operated rats. Serum ALP, OC and urinary DPD were elevated significantly in the sedentary OVX rats compared to the sham-operated control rats. Swimming exercise improved OVX-induced bone oxidative stress with significantly lower levels of MDA and H2O2 associated with higher levels of SOD and GPx in exercised rats when compared to sedentary OVX rats. Similarly, exercise limited OVX-induced increase in bone turnover by suppression of serum ALP, OC, and urinary DPD levels.

It was concluded that OVX in rats induced bone oxidative stress with increased bone turnover and altered its biochemical markers. Short-term swimming exercise for 7 weeks partially stabilized bone turnover and improved oxidative stress but not able to fully reverse the abnormalities induced by OVX. Further researches are indicated to detect the effect of long-term exercise especially on bone mineral content and density.

#### SLEEP DISORDERS IN EGYPTIAN HEMODIALYSIS PATIENTS IN MANSOURA UROLOGY AND NEPHROLOGY CENTER

#### Alaa A Sabry MD\*, Hamdy Abo-Zenah MD\*, Ahmed Hassan MD\*, Shaheer K. George MD\*\* and Abd El-Baset M. Saleh MD\*\*\*

Departments of Mansoura Urology and Nephrology Center\*, Internal Medicine\*\*,
& Thoracic Medicine, Sleep-Disordered Breathing Unit\*\*\*,

Mansoura University, and Menuifiya University Faculty of Medicine, Egypt.

#### **Abstract**

Introduction: Many patients with kidney failure undergoing dialysis therapy suffer from sleep disturbances. The prevalence of such sleep disorders is higher when compared to the general population. Subjects & Methods: Patients were recruited from the 3 haemodilaysis units of Urology and Nephrology Center, Mansoura University, Egypt over 4 months period. Eighty eight patients (41.59±16.3 years) who satisfied our inclusion criteria were enrolled in our study. The demographic and clinical data including insomnia as well as the biochemical parameters were collected by the attending nephrologists. Other sleep disorders such as restless leg syndrome (RLS), obstructive sleep apnoea syndrome (OSAS), excessive daytime sleepiness (EDS), narcolepsy and sleep walking were investigated by questionnaire of the International Restless Legs Syndrome Study Group (IRLSSG), the Berlin Questionnaire, Italian version of Epworth Sleepiness Scale, International Classification of Sleep Disorders (ICSD) and the specific questions of Hatoum's sleep questionnaire, respectively. Results: Sleep disorders were prevalent in our patients (79.5%) and such prevalence was statistically significant (Chi-squared=30.7, p=<0.0001). The most common sleep abnormality was insomnia (65.9%), followed by RLS (42%), OSAS (31.8%), snoring (27.3%), EDS (27.3%) and narcolepsy (15.9%) while the least was sleep walking (3.4%). Insomnia correlated with anemia (r=0.31, p=0.003), anxiety (r=0.279, p=0.042), depression (r=0.298, p=0.24) and RLS (r=0.327, p=0.002). Also, RLS correlated with hypoalbuminemia (r=0.41, p=<0.0001), anemia (r=0.301 and p=0.046), hyperphosphatemia (r=0.343 and p=0.001), and excessive daytime sleepiness correlated with OSAS (r=0.5, p=<0.0001), snoring (r=0.341, p=0.001), and social worry (r=0.27, p=0.011). Of note, no correlation was observed between the evaluated sleep disorders and patients' gender. The indicatives for insomnia among our study population were inadequate dialysis (OR=8.71, p=0.001), anemia (OR=3.58, p=0.012), hypoalbuminemia (OR=2.71, p=0.044) and RLS (OR=8.50, p=0.0003). However, anemia (OR=2.67, p=0.034), malnurishment (OR=9.23, p=0.0002) and hyperphosphatemia (OR=5.14, p=0.0005) were the associates of RLS. Conclusion: Sleep disorders are quite common in the Egyptian hemodialysis populations especially those who are anemic, malnourished; and underdialyzed. Assessment of sleep quality, preferably with polysomnography, is necessary to confirm our results and population-specific sleep-promoting interventions during clinical practice are warranted.

#### BIOLOGICAL RISK FACTORS AFFECTING MENTAL RETARDATION IN LIBYAN CHILDREN

### Nura N. Mohammed, Nuri M. Shembsh MD\* and Zienat El Kholi MD\*\*

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\*\* Professor of Biochemistry, High Medical Institute, Alexandria., Egypt

#### **Abstract**

Mental retardation is the most frequently occuring handicap in children. It interferes with learning, social and psychological development. This work was planned, therefore, to throw light on mental retardation in Libya, by studying the possible risk factors affecting the etiology of this medical and social problem and to evaluate the different risk factors affecting mental retardation in Libyan children.

One hundred and sixty seven Libyan mentally retarded children from both sexes were engaged in this study. They were grouped according to etiology of mental retardation into: Down's syndrome (Group I), cerebral palsy (Group II), other causes rater than DS or CP (group III).

I.Q assessment was done for all patients at time of diagnosis with detailed personal and family history. Fifty healthy children with normal I.Q. were selected as controls.

The results obtained revealed the following:

- 1. Biological and risk factors
- a- The incidence of mental retardation was higher in males than females.
- b- Out of 167 patients 57.5% suffered severe mental retardation.
- c- The first borns were prevalent 46 (27.4%) among the studied cases.
- d- 60.5% of the children with MR were born to mothers below 35 years, while 61% were born to fathers above 35 years.
- e- Consanguinity percentage was recorded in about half of the total patients.
- *f-* Out of 167 patients, 54.5% of children had a non-educated mothers, while 46.7% of the fathers were not educated.
- *g-* In this study, mental retardation was more common in children with low socio-economic class.

#### USEFULNESS OF CHO / CR RATIO IN MR SPECTROSCOPY IN DIFFERENTIATION BETWEEN RECURRENT BRAIN TUMOR AND RADIATION NECROSIS

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#### **Abstract**

**Objective:** The aim of this study was to evaluate the role of cho/cr ratio in MR spectroscopy (MRS) in differentiation between recurrent tumor and radiation necrosis in equivocal brain lesions following radiotherapy for brain tumors.

Subjects and Methods: Hydrogen (1H) MR spectroscopy was performed for 17 patients presented with recent neurological manifestations and / or their CT or MRI examination revealed an equivocal brain lesion during follow up after completion of radiotherapy for brain tumor {gliomas (12), medulloblastoma (3) and ependymoma (2)}. Volume of interest (VOI) was placed inside the lesion in T2 WIs (high SI) using single voxel spectroscopy in 7 patients and chemical shift for 10 patients according to the size and homogenecity of the lesion. Ratios of peak areas under the choline (Cho) and creatine (Cr) resonance were estimated in all cases and compared with those from samples of normal brain tissue. **Results:** The Cho/Cr ratios in cases of tumor recurrence  $(1.5 \pm 0.6)$  were elevated compared to those in normal brain tissue while there was a reduction of Cho/Cr ratio (0.4  $\pm$  0.3) in radiation necrosis compared to normal brain. We also reported an obvious increase of Cho/Cr ratio in tumor recurrence than radiation necrosis. Conclusion: Cho/Cr ratio in MR Spectroscopy represents a recent helpful modality to differentiate between tumor recurrence and radiation necrosis in follow up of brain tumor patients after completion of radiotherapy.

#### SIMPLE, EASY, FAST AND RELIABLE SCREENING TESTS FOR CLINICAL DIAGNOSIS OF DIABETIC PERIPHERAL POLYNEUROPATHY

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Departments of Rheumatology & Rehabilitation and Internal Medicine\_ Mansoura Faculty of Medicine, Mansoura University, Mansoura-Egypt

#### **Abstract**

**Introduction:** Early diagnosis of diabetic peripheral polyneuropathy is very important as it can cause significant morbidity and mortality. For diagnosing polyneuropathy, no golden standard is available.

The aim of this study: Was to evaluate the role of Diabetic Neuropathy Symptom Score (DNSS), Diabetic Neuropathy Examination Score (DNES) and Semmes-Winstein Monofilament Examination (SWME) tests in diagnosis of diabetic peripheral polyneuropathy and study their correlation with parameters of nerve conduction studies (NCS).

**Subjects and methods:** This study was carried out on 50 patients with type II diabetes mellitus in addition to 15 apparently healthy subjects matched for age and sex as a control group. All patients were subjected to full history taking, general examination, and full neurological examination, and DNSS, DNES, SWME and laboratory investigations. Nerve conduction studies were carried out for all patients & the control group.

**Results:** Polyneuropathy was diagnosed in 35 patients (70%) by DNSS, in 36 patients (72%) by DNES, in 27 patients (54%) by SWME and in 45 patients (90%) by NCS. There were significant correlation between DNSS, DNES, SWME and the parameters of NCS.

**Conclusion:** DNSS, DNES and SWME are simple, easy, fast, reliable and valid methods for diagnosis of most cases of peripheral polyneuropathy especially when used in combination.

#### ANTI-CHROMATIN AND ANTI-HISTONE ANTIBODIES IN EGYPTIAN PATIENTS WITH SYSTEMIC LUPUS ERYTHEMATOSUS

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#### **Abstract**

**Introduction:** There has been a renewed interest in anti-chromatin and anti-histone antibodies in the last few years. A number of research papers have demonstrated the clinical utility of these antibodies to help diagnosis of systemic lupus erythematosus (SLE).

**Aim of the work:** To assess the prevalence of anti-chromatin and anti-histone antibodies in patients with SLE and to correlate serum levels of these antibodies with clinical features of the disease.

**Patients and Methods:** The presence of anti-chromatin and anti-histone antibodies in 38 patients with SLE was investigated by an enzyme-linked immunosorbent assay (ELISA) To determine the specificity of these antibodies, 15 patients with rheumatoid arthritis, 15 patient with systemic sclerosis and 15 normal controls were also tested.

**Results:** Increased levels of anti-chromatin antibodies were detected in 89.5% of SLE patients. In contrast they were found in only 33.3% of those with rheumatoid arthritis (RA), 26.7% with systemic sclerosis (SSc) and in non of the healthy controls. Increased levels of anti-histone antibodies were detected in 92.1% of SLE patients. In contrast they were found in only 20% of RA patients, 33.3% of SS patients and in non of the healthy controls. Sensitivity of anti-chromatin antibodies in SLE patients was 89.5% and specificity was 80.0%, while sensitivity of anti-histone antibodies was 92.1% and specificity was 82.2%. Significant associations were found between the levels of anti-chromatin antibodies and arthritis, malar rash, oral ulcer, and pulmonary affection (P<0.05) and also, lupus

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nephritis (P<0.01), and disease activity score as measured by SLE disease activity index (SLEDAI) (P<0.001). Significant association was found between anti-histone antibodies and fatigue (P<0.05). The incidence of positive anti-chromatin and anti-histone antibodies was significantly higher than that of anti-dsDNA antibodies in early stage of the disease.

**Conclusions:** Anti-chromatin and anti-histone antibodies are both sensitive and specific for SLE and could be a useful addition to the laboratory tests that can help in the diagnosis of SLE. Anti-chromatin antibodies seem to be a promising marker useful in early diagnosis and assessment of disease activity in SLE patients especially in patients who are negative for anti-dsDNA antibodies..

Keywords: Anti-chromatin antibodies, anti-histone antibodies, SLE

## CORNEAL POWER MEASUREMENT AFTER MYOPIC LASIK USING THE PENTACAM

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#### **Abstract**

**Purpose:** To evaluate the accuracy of pentacam and using the total corneal refractive power formula for measuring corneal refractive power in patients following laser in situ keratomileusis (LASIK)

**Materials and Methods:** In 39 eyes of 20 LASIK patients (mean age  $28.53 \pm 10.13$  years), I compared the values of corneal refractive power calculated using the total refractive power formula with the values estimated using clinical history method.

**Results:** The postoperative mean corneal refractive power from total refractive power formula (total RP) was  $40.43 \pm 1.44$  D (range 36.38 to 43.45 D); compared with the value estimated from the historical method (HisRP) of  $40.31 \pm 1.47$  D (range 36.53 to 43.59 D). The mean difference between HisRP and total RP was  $-0.11 \pm 0.33$  D (range -0.72 to 0.68 D). The Pearson correlation coefficients (r) were 0.999 for HisRP and total RP.

**Conclusion:** In eyes following LASIK, the corneal refractive powers derived from the total RP formula correlated well with the values derived from the clinical history method.

Key words: Myopia, keratometry, lasik, biometry, pentacam.

## PNEUMOSLIDE-M TEST. AS A DIAGNOSTIC TOOL FOR ATYPICAL LOWER RESPIRATORY TRACT INFECTIONS IN PEDIATRIC PATIENTS

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#### **Abstract**

Background: The diagnosis and clinical management of lower respiratory tract infections (LRTI) pose challenges to pediatricians as new technology is developed and new pathogens emerge in the spectrum of clinical diagnosis. Objective: This study aimed at rapid diagnosis of atypical lower respiratory tract infections in pediatric patients using Pneumoslide-M test.. Methods: This study included 55 children with acute LRTI (pneumonia, bronchiolitis and croup) their age ranged from  $\geq$  one month to  $\leq$  two years with the mean age of (12.8 $\pm$ 3.7). All cases were subjected to complete history taking thorough clinical examination and laboratory tests which included: Complete blood count, nasopharyngeal aspirates smear and culture. According to the microbiological results the studied patients were classified into two groups: Group I: The caustive pathogen was detected by the conventional microbiological methods, this includes 31 children and Group II: In which the caustive pathogen was not identified by the conventional microbiological methods (Atypical lower respiratory tract infections), this includes 24 children. Cases of group II only were subjected to Pneumoslide-M test. (Indirect immunofluorescence test for detection of serum IgM against respiratory viruses and atypical bacteria). Results: Pneumoslide M test could identify the causative pathogen in 91.7% (22 out of 24 cases) of group II patients and the diagnosis was as follows: respiratory syncytial virus (RSV) infection in 9 cases (37.5%), parainfluenza viruses (PIV) infection in 5 cases (20.8%), adenovirus infection in 4 cases (16.7%), influenza A virus infection in 3 cases (12.5%). M. pneumoniae infection was detected in only one case (4.2%) and 2 cases (8.3%) remained undiagnosed .Conclusion: Viruses and atypical bacteria consti-

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tute almost 43.6% of the causative agents of LRTI in young children especially in winter times. The use of Pneumoslide M test  $\,$  has great value in rapid diagnosis of this infection .

#### STUDY OF MALONDIALDHYDE, GLUTATHIONE AND SUPEROXIDE DISMUTASE IN MILD AND SEVER PREECLAMPTIC WOMEN

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#### **Abstract**

The cause of preeclampsia remains largely unknown, but oxidative stress and a generalized inflammatory state are features of the maternal syndrome. The aim of this work is to determine the role of free radicals and antioxidants such as superoxide dismutase and glutathione in the pathogenesis of preeclampsia. This study was carried out on 65 females: 50 preeclamptic (25 mild preeclampsia and 25 severe preeclampsia) patients and 15 healthy normotensive pregnant females as control. All subjects were submitted to full history taking, general clinical examination, laboratory investigations including, measurements of plasma superoxide dismutase (SOD), erythrocyte glutathione (GSH), plasma malondialdehyde (MDA), serum cholesterol, serum triglyceride, serum HDLc, serum LDLc, and total proteins in urine. The study showed that SOD (p<0.001), GSH (p<0.001) and HDLc (p<0.001) levels are significantly lower in preeclampsia cases than control, while MDA (p<0.001), TG (p<0.001) and LDLc (p<0.001) levels are significantly higher in preeclampsia cases than control. There is no significant difference between control group and preeclampsia cases as regards to total cholesterol (p<0.05). There is significant negative correlation between HDLc and MDA(p<0.05) in preeclampsia cases. It could be concluded be that hyperlipidemia, elevated lipid peroxides and decreased antioxidant capacity might be involved in the pathogenesis of preeclampsia.

# THE EFFECT OF EPIDURAL NALBUPHINE AND MORPHINE VERSUS SYSTEMIC NALBUPHINE WITH EPIDURAL MORPHINE IN PATIENTS SUBMITTED FOR MAJOR ABDOMINAL SURGERY

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#### **Abstract**

**Background:** In this double blind randomized study we compared The effects of epidural nalbuphine to intravenous (IV) nalbuphine on the epidural morphine in patients undergoing elective major abdominal surgery.

**Methods:**  $G^M$  (control group) received epidural mixture of bupivacaine 0.5% 1 mg/kg and preservative free morphine  $150 \mu g/ml$  bupivacaine  $G^{M-epiN}$  received epidural mixture of bupivacaine 0.5% 1 mg/kg and preservative free morphine  $150 \mu g/ml$  bupivacaine and preservative and buffer free nalbuphine  $30 \mu g/mL$  bupivacaine

 $G^{MivN}$  received epidural mixture of bupivacaine 0.5% 1mg/kg and preservative free morphine 150 $\mu$ g/ml bupivacaine and preservative and buffer free nalbuphine 0.1mg/kg (IV)

**Results:** There was no significant changes in analysesia score or sedation score between 3 groups. Nalbuphine markedly adverse the side effects of morphine

Regarding haemodynamics There was significant decrease in HR and MAP in the  $G^{M\text{-}epiN}$   $G^{MivN}$  groups comparing with  $G^{M}$ 

**Conclusion:** Our data indicate that the addition of nalbuphine either intra venous or epidurally prevent the morphine induced side effects without reversing its analgesic effect

#### SELENIUM ADMINISTRATION IMPROVES LIPID PROFILES AND HEMODYNAMIC PARAMETERS IN IMMOBILIZED RATS

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#### **Abstract**

Immobilization stress is thought to increase pro-oxidants that may contribute to the development of lipid peroxidation, atherosclerosis and hypertension. Thus, the present study was designed to investigate the effect of oral administration of selenium (Se) on fasting serum lipids (triglycerides; TG, total cholesterol; TC, low-density lipoproteins; LDL, and Highdensity lipoproteins; HDL) and some hemodynamic (systolic blood pressure; SBP and vascular reactivity of aortic strips to norepinephrine; VRNE) and blood parameters (serum sodium;  $Na^+$  and potassium;  $K^+$ ) in rats exposed to immobilization stress. Forty adult male albino rats were used in this study and divided into 5 equal groups (n = 8); Normal nontreated group (NNT) served as control and given daily distilled water orally for 3 weeks (wks); Normal Se-treated group (NST) given distilled water for 1 wk, then oral sodium selenite (Se; 1.5 mg/kg) daily for another 2 wks; Immobilized non-treated group (INT) given distilled water for 3 wks, and concomitantly immobilized (6 hs/d for 1 wk) during wk 2; Immobilized Se pre- and concomitant-treated group (ISPC) given Se for 2 wks and concomitantly immobilized during wk 2, then given daily distilled water during wk 3; Immobilized Se concomitant- and post-treated group (ISCP) daily given distilled water for 1 wk, then Se during the last 2 wks with concomitant immobilization during wk 2. INT group showed significant increase of TG, TC, LDL, SBP, VRNE, and Na+ levels, but significant decrease of HDL and K<sup>+</sup> levels when compared to the corresponding parameters in NNT group. Se supplementation to normal rats did not change significantly any of the tested parameters. On the other hand, ISPC rats revealed significant lower levels of TG, TC, LDL, SBP, VRNE, and Na $^+$ , but significant higher levels of HDL and  $K^+$  when compared to the corresponding parameters in INT group. Moreover, ISCP rats revealed significant lower levels of TG, TC, LDL, SBP, VRNE, and Na $^+$ , but significant higher levels of HDL and  $K^+$  when compared to the corresponding parameters in INT and ISPC groups. From this study, it is concluded that selenium administration in cases of immobilization stress can improve the accompanied state of hyperlipidemia and hypertension specially if supplemented concomitantly and after the immobilization period.

## TAKING OFF ANTIBIOTIC PROPHYLAXIS IN CHILDREN WITH VESICOURETERAL REFLUX, IS IT POSSIBLE AND SAVE?

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#### **Abstract**

To evaluate the outcome of taking off antibiotics prophylaxis in children with persistent vesicoureteral reflux.48 children with primary vesicoureteral reflux were taken off prophylactic antibiotics in Shebin Al Koom Teaching Hospital Between 1996 and 2007. The criteria for discontinuing antibiotics were children older than 4 years with a normal voiding pattern, no significant hydronephrosis or renal scars and a minimal history of urinary tract infection (UTI). Exclusion criteria were neurogenic bladder , severe voiding dysfunctions, posterior uretheral valve and ectopic ureter. Routine follow up included duration of on and off antibiotic, grade of reflux at the time of stopping antibiotics, the occurrence of UTI and renal sonography. Sex distribution was 6 boys (12.5%) and 42 girls (87.5%). The mean patient age when stopping antibiotic was 7.2 years. VUR was bilateral in 22 patients (45.8%), on the right side in 10 patients (20.8%) and on the left side in 16 patients (33.4%). Reflux was grade I in 8 patients (16.7%), grade II in 36 patients (75%) and grade III in 4 patients (8.3%). UTIs was found in 6 patients (12.5%) after antibiotic stopping, four of them had cystitis and the other two had febrile UTIs. None of our study developed new renal scars. Taking off antibiotic prophylaxis is possible, safe and acceptable option in a selected patient population with VUR.

Key words; vesioureteral reflux, antibiotic prophylaxis, urinary tract infection.

## LAPAROSCOPIC DECORTICATION OF SYMPTOMATIC SIMPLE RENAL CYSTS

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#### **Abstract**

**Objectives:** To investigate the technique and assess results of laparoscopic decortication of symptomatic simple renal cysts.

**Patients and Methods:** Ten patients underwent trans-peritoneal laparoscopic decortication of symptomatic simple renal cysts. Complex renal cysts were excluded. Out of the 10 patients, 8 had undergone previous cyst aspiration with injection of sclerotic material for intended ablation. Out of these cysts, 8 were peripheral and 2 were peripelvic.

**Results:** The mean operative time was  $116\pm37.7$  minutes (range 90-180) and blood loss was minimal. Symptomatic success was achieved in 9 patients with a mean follow up of 7 months (range 3-9), and radiologic success was achieved in 8 patients.

**Conclusions:** Laparoscopic decortication of simple renal cysts is a safe and effective alternative to open surgery in patients who have failed conservative measures. Peripelvic cyst location makes laparoscopic decortication more challenging in the term of technical dissection yet feasible for the clinical outcome.

**Key wards:** Laparoscopy, simple renal cyst, decortication.

## SODIUM HYALURONATE EYE DROPS FOR TREATMENT OF DRY EYE

#### Magdi F. El-Khiat MD

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#### **Abstract**

Therapy for dry eye has moved from the quantity of tears, the quality of tears, through the tear-ocular surface interaction, beyond the composition of tears, to the treatment of the associated and probably causative inflammation of ocular surface and the lacrimal glands.

**Aim of Work:** To evaluate efficacy and safety of topical sodium Hyaluronate 0.2% in the treatment of patients with mild, moderate and severe dry eye disease.

**Patients and Methods:** Thirty patients suffering from mild to severe dry eye were included in the study. They were attending the ophthalmic outpatient clinic of Benha Faculty of Medicine, in the period from January 2006 to August 2006. Patients in the study were divided into two groups I & II.

**Group I:** Included 15 patients in which Sodium Hyaluronate 0.2% eye drops was used for 6 weeks.

**Group II:** Included 15 patients in which tear substitute (saline 0.9%) eye drops was used for 6 weeks (As a control group).

All patients were followed up weekly during the period of treatment by BUT, Fluorescein, Rose Bengal stain and Schirmer's test.

**Results**: In this study, the most important overall finding was that topical treatment with SH 0.2% resulted in significant improvements in objective signs and subjective parameters of mild to severe dry eye disease. In addition SH\* treatments was found to be safe and well tolerated.

#### DIAGNOSIS OF DIABETIC MACULOPATHY BY ORAL FLUORESCEIN ANGIOGRAPHY

#### Magdi F. El-Khiat MD

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#### **Abstract**

Diabetic patients with long standing diabetes have a high risk for the development of diabetic maculopathy. The prevalence of maculopathy in diabetic patients is remarkably high (42 % in type 1 and 53 % in type 2 diabetic patients). Fluorescein angiography is essential for diagnosis of diabetic maculopathy

**Aim Of Work:** To clinically evaluate the efficacy and safety of oral fluorescein angiography in cases of diabetic macular oedema.

**Patients And Methods:** Thirty patients suffering from diabetic macular oedema were included in the study.

They were divided into two groups I & II according to the route of administration of fluorescein (Oral &I.V Fluorescein)

**Results:** Oral Fluorescein angiography is an efficient and highly sensitive tool for the detection of macular oedema.

Oral sodium fluorescein angiography can not replace the conventional technique however, this procedure could be valuable in some conditions such as: large scale screening of diabetic patients, patients with non visible veins, children, uncooperative patients and patients with hepatitis & AIDS.

## TIBIAL SPINE FRACTURES: ARTHROSCOPIC ASSISTED REDUCTION AND PERCUTANEOUS KIRSCHNER WIRE FIXATION

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#### **Abstract**

The aim of this prospective study is to evaluate our results in the management of avulsion fractures of the anterior tibial spine with the aid of arthroscopy. Twelve patients with displaced tibial spine fractures with an average age of 13.3 years were the material of this study. After through clinical and radiological evaluation an operative arthroscopy for both diagnosis and treatment was done to assess and to guide both reduction and fixation with percutaneous kirschner wires. Eight added surgical techniques had required to treat the associated local knee injuries. The Lysholm scoring system was used for evaluation of the final results. Nine patients were graded as excellent, two patients as good, and one patient was graded as fair outcome. There was statistically significant correlative between the following; fracture type and positivity of anterior drawer test, age of the patients and final Lysholm scoring system, residual postoperative displacement and the final Lysholm knee scoring system, residual postoperative displacement and positive anterior drawer test was found to be statistically significant. There was no statistically significant correlative between the following; positivity of the valgus stress test and the type of the fracture, fracture type and the final Lysholm knee scoring system. Type IV fracture is the worst type regarding the incidence of associated soft tissue and bony injuries and the high rate of post-operative complications. Objective knee laxity does not always mean subjective knee laxity. The number of patients included in this study is very limited to yield a statistically significant relationship. A new comprehensive

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classification system is urged by this study.  Key words: tibial spine fracture, arthrosetion, Lysholm knee score.	copy, Kirschner wire fixa-

## PERCUTANEOUS INTERLOCKING NAILING OF TIBIAL SHAFT FRACTURES: TECHNIQUE AND OUTCOMES

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#### **Abstract**

Closed interlocking tibial nailing is a well accepted method of treating tibial fractures. There are advantages to perfoming surgery via smaller incisions. This study provides a method for percutaneous interlocking nailing of tibial shaft fractures intended to improve the technique, functional results and also reduces the problem of anterior knee pain, by avoiding injury to the infrapatellar nerve and/or iatrogenic trauma to, or dissection around, the patellar tendon. The main difference in the technique is the use of a 6 cm-long k-wire fixed temporarily in the anterior cortex of the tibial tuberosity to indicate the midline for medullary canal opening, a small stab incision of an average length of 2.5 cm reaching the tibial cortex midway between the lower pole patella and tibial tuberosity, an invented bone awl for opening the medultary canal at the entry point (sweet spot), inserting an invented graded guide pin into the medullary channel and Slide an invented sleeve over the quide pin till it hits the entry point to check the actual needed nail length through the graded guide pin (depth gauge).

Between March 2004 and March 2007 a prospective trial on 40 patients with unilateral closed tibial diaphyseal fractures was done at the Orthopaedic Surgery Department of Mansoura University Hospital. All were followed up for one year. There were twenty-five men and fifteen women with a mean age of  $40 \pm 9$  years, two female patients were excluded from the results because of lost follow up with them shortly postoperative. Early perioperative complications, including compartment syndrome, and pulmonary embolism, were checked, but no patients had such complications. Patients began full weight bearing at an average of  $14 \pm 4$  weeks postoperatively; the median time for fracture healing

was  $17\pm4$  weeks, 34% out of our patients experienced different degrees of anterior knee pain, 2.5% grade zero, 7.9% grade 1, 7.9% grade 2 and 15.8% grade 3 according to the Functional Assessment Score (FAS). At the time of final follow-up, there were 20 excellent, 16 good results, one fair and one poor result according to Johner & Wruh's Criteria (Johner et al., 1983). This modified technique and devices for percutaneous interlocking tibial nailing provide significant advantages when compared with the standard technique so that the time to union, the functional outcome and incidence of anterior knee pain, are significantly improved.

#### A STUDY OF STRESS IN MEDICAL STUDENTS AT MANSOURA UNIVERSITY

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#### **Abstract**

**Aim:** This is a cross sectional study on 311 medical students selected from students of Mansoura Medical College to highlight the prevalence of different stressors and factors associated with perceived stress.

**Patients & Methods:** Data was collected through an anonymous self-administered questionnaire covering the socio-demographic data, stressors, perceived stress scale, assessment of physical wellbeing, hospital anxiety and depression scale as well as neuroticism and extraversion subscales of Eysenck personality questionnaire.

**Results:** Only 5.5% of students reported no stressors. On average each student reported a mean of 3.4 stressors. The most common stressor is relationship problems with teachers. Multivariate logistic regression revealed that the independent predictors of high stress level were presence of more than five stressors, anxiety, depression as well as global sickness index and extroversion and neuroticism sub-scales. Decreasing stressors and ameliorating their stressful effect will minimize the prevalence of perceived stress among medical students.

**Conclusion:** This study calls for the necessity for planning and introduction of psychiatric and social facilities into health services of Mansoura University.

**Keywords:** Stressor, perceived stress, medical students, Mansoura College of Medicine.