

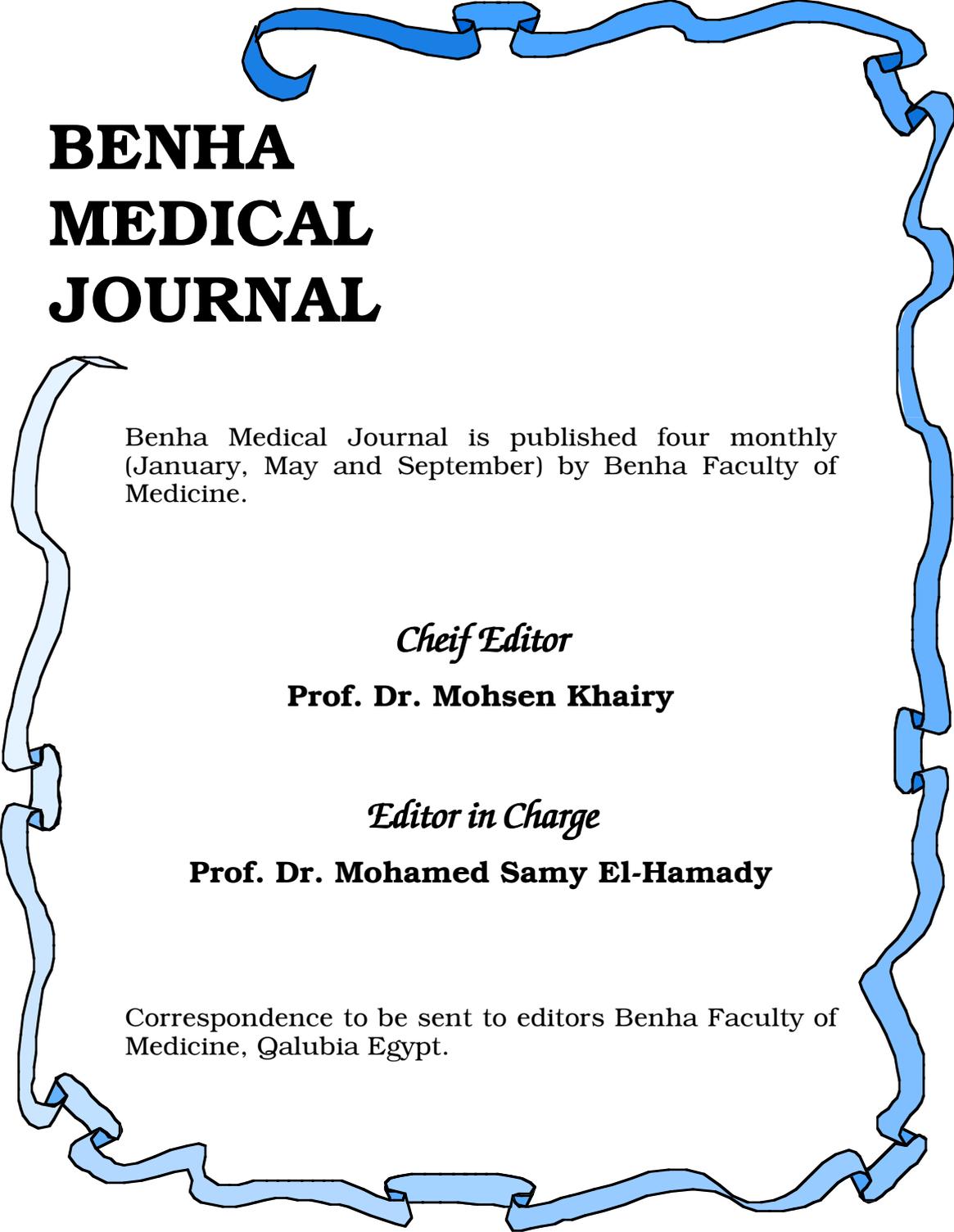
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DISTRIBUTION OF INTERNAL LARYNGEAL NERVE IN HUMAN

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Abstract

The details of course and distribution of human internal laryngeal nerve was studied in eleven dissected human larynges. The internal laryngeal nerve is divided into three divisions: superior, middle and inferior. The superior division supplies the most posterior part of the mucosa of the tongue, vallecula, lateral and median glossoepiglottic folds and the epiglottis (lingual and laryngeal surfaces). The middle division supplies the aryepiglottic fold and mucosa of the laryngeal vestibule. The inferior division supplies the mucosa of piriform fossa, the mucosa covering back of interarytenoid region, the mucosa covering the back of posterior lamina of cricoid cartilage and the mucosa covering the sides of laryngopharynx. The inferior division gives anastomotic branch to the recurrent laryngeal nerve. It also appears to supply motor innervation to the interarytenoid muscle and upper oesophageal sphincter. This observation is contrary to current concepts of the internal laryngeal nerve as a purely sensory nerve. These findings can be used to guide surgical attempts to reinnervate the laryngeal mucosa when the sensation is lost due to neurological disease and can play a role in the explanation of different positions of vocal cords in cases of vocal cord paralysis.

LAPAROSCOPIC RENAL CYST DECORTICATION

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Abstract

Objective : To evaluate the efficacy of laparoscopy as a minimally invasive procedure for management of simple renal cysts.

Patients and methods:- Between January'2001 to March 2002 a total of 20 patients with symptomatic renal cysts admitted to urology department, Benha faculty of medicine were subjected to the study. They were evaluated by history taking, laboratory investigations, I.V.U., ultrasonography and abdominal C.T. Transperitoneal laparoscopic renal cyst decortication was done to all patients. Follow up was done to the patients after 6 months and one year by abdominal ultrasonography.

Results:- The mean cyst size was 9.5 ± 1.3 cm (range 5-13 cm). The mean operative time was 1.7 ± 0.2 hours (range 1.1-2.1). 80% of patients has immediate pain relief and 20% of patients had persistent pain after surgery. All patients were discharged after 24 hours with no postoperative complications. Cystic fluid analysis and cystic wall histopathological analysis revealed no malignancy of any patients. Follow up after 1 year revealed no recurrence of the cysts.

Conclusion :- Laparoscopic renal cyst decortication is a minimally invasive technique which is safe and effective for management of simple renal cysts with less morbidity and early convalescence.

EVALUATION OF LEFT VENTRICULAR DIASTOLIC FUNCTION IN CHILDREN WITH ACUTE RHEUMATIC FEVER

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Abstract

This work was planned to evaluate the left ventricular diastolic function in children with acute rheumatic carditis. The study comprised 30 children with acute rheumatic fever 17 males (56.7%) and 13 females (43.3%) their ages ranged from 6 to 15 years. They were divided into two groups. Group I which consists of 20 cases with rheumatic carditis and group II, they were 10 cases with acute rheumatic fever (ARE) without clinical carditis. Twenty children of age and sex matched to patients group were taken as a control. They were divided into two other groups, group III were 10 patients with chronic quiescent rheumatic heart disease, compared to group I and 10 healthy children, group IV were compared to group II. All patients were subjected to full history taking, full clinical examination and laboratory investigations, standard 12 leads ECG, plane x-ray and echocardiography emphasis on left ventricular diastolic function. There was great affection of LV diastolic function indices among patients with acute rheumatic carditis GI when compared with GUI (quiescent RHD). There was significant decrease of E velocity and E/A ratio indices which measured respectively 88.71 ± 30.85 cm/sec and 1.43 ± 0.67 in GI while in group III were 120.10 ± 29.35 cm/sec and 2.00 ± 0.59 . As regard. GUI was 100.00 ± 28.28 m/sec and the difference between both groups was statistically significant. Also, isovolumic relaxation time (IVRT) mean value in GI was 90.60 ± 28.34 msec and was 49.25 ± 12.12 msec in GUI and the difference between both groups was statistically significant. Also there was prolongation of the IVRT duration as the only parameter of diastolic function of LV among ARF patients without carditis

(GII) when compared with GIV and the difference was statistically significant. The results revealed that the systolic function of left ventricle as evaluated by fractional shortening (FS) in ART patients with carditis (Group I) was $34.7 \pm 6.2\%$ and in patients with chronic quiescent RHD (Group III) was $33.1 \pm 5.97\%$ and there was no significant statistical difference between both groups. Also, FS in ARF patients without carditis was $35.3 \pm 3.4\%$ and in normal control children G IV was $37.7 \pm 6.5\%$ and there was no significant statistical difference between both groups.

Conclusion: Doppler echocardiography proved to be of great value in detecting diastolic function indices as IVRT which may be used as early sensitive parameter for diagnosis of carditis in subclinical carditis. Also, diastolic function can be used for the early detection of myocardial involvement in patients with acute rheumatic fever.

**COLOUR-CODED AND PULSED DOPPLER
ULTRASONOGRAPHY OF THE TESTIS IN
RELATION TO TESTICULAR SPERM
EXTRACTION IN CASES OF
NON-OBSTRUCTIVE AZOOSPERMIA**

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Abstract

Purpose: Evaluation of the role of colour coded and pulsed Doppler ultrasound as predictive factors for the success of sperm retrieval in cases of non-obstructive azoospermia to avoid the damage that may be done to the testes by repeated biopsies.

Material and Methods: A total of 100 men (30 normal fertile men and 70 non-obstructive azoospermic men) were included in this study. All of them were examined scrotally by colour coded and pulsed Doppler ultrasound. The systolic peak velocity of the centripetal arteries, in areas of the testis showing good perfusion in colour coded Doppler examination, were recorded. The sites(s) of good testicular perfusion were recorded. Therapeutic testicular sperm extraction (TESE) was done for 24 of the study group guided by the ultrasound examination for determination of the side and site of biopsy taking.

Results: Among the control group, the testes appeared in colour coded Doppler as gray regions while in testicular vessels appeared in red and blue hues which were abundant and homogeneously distributed in all areas of the testis. The mean systolic peak velocity of the centripetal arteries was 8.46 ± 2.17 cm/sec (range 5-15 cm/sec).

In the study group, the colour coded Doppler of the testis appeared as gray coarse granular texture with irregularly distributed red and blue hues (testicular vasculature). However no specific pattern was found. The mean systolic peak velocity of centripetal arteries of this group was 4.87 ± 1.28 cm/sec (range 3 to 7 cm/sec). Comparing with the mean systolic peak velocity of the control group the difference was statistically highly;

significant ($t=1.95$, $P<0.01$). Out of the study group 24 (34.28%) underwent a trial of testicular sperm extraction. Guided by the colour coded and pulsed Doppler. The site (s) of biopsy was chosen. The mean number of incisions needed to get sperms was 1.88 ± 0.75 incision per testis (range 1-3). Sperms were retrieved from 8 out of 14 cases (57.1%) of cases with systolic peak velocity more than 4 cm/sec., and in one case out of 10 cases (10%) of cases with systolic peak velocity <4 cm/se. The use of systolic peak velocity of more than 4 cm/sec, of the centripetal arteries in areas with good vasculature on colour coded Doppler study, has a sensitivity of 88.8% and specificity of 90%, a positive predictive value of 57% and a negative predictive value of 90%.

Conclusion: Colour coded Doppler and pulsed Doppler ultrasound are non-invasive guiding tools in testicular sperm extraction giving a better guide to a region where spermatogenesis takes place. Testicular sperm extraction from non-obstructive azoospermic testes will be more effective. less biopsies will be needed and testicular damage will significantly be lowered.

VIDEO-ASSISTED THORACOSCOPIC SYMPATHECTOMY IN PATIENTS WITH PRIMARY HYPERHIDROSIS

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Abstract

***OBEJECTIVE:** To evaluate the efficacy and results of VATS sympathectomy in management of primary hyperhidrosis as well as postoperative quality of life.*

***PATIENTS and METHODS:** Between July 1998 and December 2000, 34 patients of primary hyperhidrosis underwent video-assisted thoracoscopic sympathectomy procedures to treat hyperhidrosis. Operative results, complications, patient satisfaction as well as the results after the follow up period were determined to be evaluated.*

***RESULTS:** Twenty- two patients were males and 12 females. The mean age was 26.5 ± 4.7 years. There was 23 patients (67.6%) with family history. Twenty -four patients presented with palmar-plantar hyperhidrosis, 2 with axillary hyperhidrosis, 3 with craniofacial hyperhidrosis and 5 patients with combined type. Extension of resection of the thoracic sympathetic ganglia was according to the type of hyperhidrosis. The mean operative time was 46.4 ± 9.3 minutes. The mean postoperative hospital stay was 2.2 ± 0.9 days. Twenty-six patients (76.5%) were discharged with satisfactory results. Six patients (17.6%) developed compensatory hyperhidrosis; 2 of them had tolerable compensatory hyperhidrosis; and 2 patients (5.9%) developed unilateral transient Homer's syndrome. Follow-up for a mean of 22 ± 2.2 months. The quality of life become better or much better in 28 patients (82.4%), the same (no improvement) in 3 patients (8.8%) and become worse in 3 patients. A second operation was done in 2 patients (5.9%) due to recurrence. There was no early*

or late mortality.

CONCLUSION: Video-assisted thoracoscopic sympathectomy is a safe procedure which effectively treats primary hyperhidrosis and is associated with short hospital stay, high patient satisfaction rates, and low rates of compensatory hyperhidrosis. Homer's syndrome or other complications.

**EARLY EXERCISE TESTING AFTER
TREATMENT WITH THROMBOLYTIC DRUGS
FOR ACUTE MYOCARDIAL INFARCTION :
IMPORTANCE OF RECIPROCAL ST
SEGMENT DEPRESSION**

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Abstract

Background: In acute myocardial infarction, ST segment elevation in the electrocardiogram obtained on presentation is often accompanied by ST depression. Debate on the importance of this reciprocal ST depression continues.

Objective: To study the value of reciprocal ST segment depression during early exercise ECG in patients presented with acute myocardial infarction and received thrombolytic therapy.

Patients and Methods: Fifty patients who received intravenous thrombolytic therapy for acute myocardial infarction were subjected to the following:-

- Full history taking, thorough clinical examination, and 12 leads surface ECG, exercise ECG, echocardiography and coronary angiography.

Patients were classified into three groups according to exercise test results:

- Group I without ST segment change.
- Group II with isolated ST segment depression.
- Group III with reciprocal ST segment depression.

Results: There was no significant difference between the three groups as regard age, sex, hypertension, hypercholesterolemia, diabetes mellitus and the occurrence of reciprocal ST segment depression during exercise.

Chest pain during exercise was significantly higher in patients with

isolated ST segment depression and was lower in those either with reciprocal or without ST segment depression

Wall motion abnormalities were less in patients with reciprocal ST depression, but without statistically significant difference.

Left ventricular ejection fraction was lower in patients with reciprocal ST depression.

The reciprocal ST depression during exercise was significantly associated with single vessel disease and with persistent occlusion of the artery related to infarction.

Conclusion and recommendations: Reciprocal ST segment depression that occurred during early exercise stress testing in patients with acute myocardial infarction who were treated by thrombolytic therapy is most probably due to a passive electrical phenomenon and not due to remote ischemia. The performance of this study in a large number of patients using all possible new diagnostic modalities and extending the scale of the study to include patients late after myocardial infarction should be done.

**EFFECT OF PHACOEMULSIFICATION WITH
INTRAOCULAR LENS IMPLANTATION
PERFORMED AFTER A FUNCTIONING
TRABECULECTOMY ON THE
INTRAOCULAR PRESSURE**

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Abstract

To evaluate the effect of phacoemulsification with intraocular lens implantation on the intraocular pressure in eyes with functioning trabeculectomy. The study included 35 eyes of 29 patients, 12 males and 17 females, with a previous functioning trabeculectomy. Patients were, Subjected to; history taking, complete ophthalmological examination including the best corrected visual acuity, bleb morphology, type of cataract, fundus examination when possible, gonioscopy, and applanation tonometry. All patients underwent phacoemulsification with foldable acrylic (Alcon. AcrySofMA 60 BM, Fortworth.TX) intraocular lens implantation through a corneal incision. The follow up period ranged from 12 to 15 months. The age ranged from 23 to 70 years. Glaucoma was primary open angle in 18 eyes, pigmentary in 6 eyes, pseudoexfoliative in 7 eyes and steroid induced in 4 eyes. The glaucoma procedure was found; to be subscleral trabeculectomy alone in 20 eyes, argon laser trabeculoplasty followed by subscleral trabeculectomy in 10 eyes and Mitomycin-C augmented subscleral trabeculectomy in 5 eyes. The time elapsed between glaucoma surgery and phacoemulsification varied from 8 months to 10 years. The mean IOP Just before phacoemulsification was 15.14 ± 2.85 mmHg. After phacoemulsification, there was a statistically significant decrease in the mean IOP by 1.45 mmHg at 6 months and by 2.13 mmHg at 12 months postoperatively. Phacoemulsification and intraocular lens implantation performed 8 months or more after trabeculectomy is associated with a statistically significant decrease in the intraocular pressure.

**ATTENUATION OF CARDIOVASCULAR
RESPONSE TO TRACHEAL EXTUBATION,
PROSTAGLANDIN E1, LIDOCAINE AND
PROSTAGLANDIN E1 - LIDOCAINE
COMBINATION**

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Abstract

Tracheal extubation causes hypertension and tachycardia which may cause imbalance between myocardial oxygen demand and supply especially in patients at risk of coronary artery disease. The aim of this Study is to compare the efficacy of intravenous infusion of prostaglandin E], Lidocaine and prostaglandin E¹-Lidocaine combination for suppressing the cardiovascular changes during tracheal extubation and emergence from anesthesia. 100 adult patients (ASA MI) were included in the study who undergone general anesthesia for routine elective minor orthopedic or gynecologic surgery. They were divided into 4 groups 25 patients each and are classified as follow:

Group 1 (n = 25) received saline as control group, group 2 (n =25) received prostaglandin E1, iv infusion 0.1 ug/kg/min from completion of surgery until 5 minutes after tracheal extubation, group 3 (n = 25) received lidocaine intravenous 1mg/kg, 2 minutes before tracheal extubation, and group 4 (n = 25) received prostaglandin E1, infusion 0.1 M/kg/min plus lidocaine 1 mg/kg iu from completion of surgery until 5 minutes after tracheal extubation, anesthesia was maintained with seuofluuane 1.0-2.5% and nitrous oxide 60% with oxygen. Heart rate (HR), Systolic Arterial Blood Pressure (SBP), Diastolic Blood Pressure (DBP) were measured before and after tracheal extubation. We found that Lidocaine alone and prostaglandin E1-Lidocaine combination attenuated the increase in

blood pressure and heart rate observed in control group. Prostaglandin E1 alone was affecting in attenuating hypertensive response but ineffective for attenuation of tachycardia. The suppressive effect of prostaglandin E1-Lidocaine combination on blood pressure was superior to that of each drug alone, and the combined effect on HR was similar to that of Lidocaine alone.

Atm Of The Work : *To compare the ability of prostaglandin E1, Lidocaine or their combination to blunt haemodynamic effects of tracheal extubation.*

**CONTROLLED HYPOTENSIVE
ANESTHESIA DURING TYMPANOPLASTY :
A COMPARISON OF RAMIFENTANIL,
NITROPRUSSIDE AND ESMOLOL**

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Department o/E N T.Faculty of Medicine. AL Azhar University, Egypt

Abstract

We studied 30 normotensive ASA physical status HI patients undergoing tympanoplasty. They were divided into three groups 10 patients each. Anesthesia was induced with 2.5 mg/kg propofol IV followed by continuous infusion of 120 µg/kg/min.

Group I (n=10) Remifentanil group (remi) received 1 µg/kg remifentanil IV in 30-60 sec. followed by continuous infusion of 0.25-0.50 µg/kg/min.

Group II (n=10) Sodium nitroprusside group (SNP) received continuous IV infusion of sodium nitroprusside at a rate of 0.20 - 0.30 µg/kg/min.

Group III (n=10) Esmolol group (esmo) received 500 mg/kg. esmolol iv in 30 sec followed by continuous infusion of 100-300 mg/kg/min. the surgeon blinded to hypotensive agent used and the haemodynamic variable performed all the operations. The surgeon used Average Category Scale (ACS) to assess surgical field value of 2-3 being ideal. A target systolic arterial blood pressure (SABP) of 80 mm Hg was achieved by varying the three used drugs by infusion only.

The results demonstrated that controlled hypotension was achieved at the target pressure of 80 mm Hg within 105±16, 67±4.4 and 51.3±4.4 sec for remifentanil, nitroprusside and esmolol, respectively. The heart rate decreased from base line (Tab HI) by 20±4 % (p<0.01) in remifentanil group, by 9±6% (p<0.01) in esmo group but increased by 30±8% (p< 0.01) in SNP group (p<0.01). The ACS during surgery was 3, 3 and 2 for remifentanil, sodium nitroprusside and esmolol, respectively. Controlled hypotension was sustained in all three groups throughout surgery. Sodium nitroprusside decreased the pH and increased Pa CO₂. There were no postoperative complications in any of the three groups.

THE PROGNOSTIC SIGNIFICANCE OF ANGIOGENESIS AND MAST CELL IN ESOPHAGEAL SQUAMOUS CELL CARCINOMA

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Abstract

AIMS: Squamous cell carcinoma (SCC) of the esophagus is among the most malignant neoplasms and is associated with a dismal prognosis. Angiogenesis is essential for solid tumor growth. Although intratumoral microvessel density (MVD), which represents a measure of tumor angiogenesis, is an important prognostic factor in several tumors, its role in SCC of the esophagus is still controversial. Mast cells are among the host immune cells which have been implicated in tumor angiogenesis. The role of mast cell density (MCD) in prognosis and angiogenesis is yet to be delineated in this disease. The aim of this study was to investigate the prognostic significance of MVD and MCD in SCC of the esophagus and to evaluate the correlation between them. METHODS: The role of MVD and MCD were investigated in tumor specimens from 60 patients diagnosed as SCC of the esophagus. Vascular endothelial cells were stained with anti-CD34 antibody and mast cells with toluidine blue. RESULTS:

MVD and MCD were significantly associated with tumor size, histologic grade, lymph node metastasis and tumor stage. A significant correlation was noted between MVD and MCD values ($p < 0.05$). However, no significant association was found between both MVD and MCD and patient's age, sex or with tumor location ($p > 0.05$). CONCLUSION: These results support the suggestion that MVD is a reliable independent prognostic factor in SCC of the esophagus. Moreover, MCD was found to have a role in angiogenesis of these tumors and might be implicated in the biological behaviour of this type of cancer.

AGE-RELATED CHANGES OF THE CARDIAC RESPONSES TO LIVER CIRRHOSIS

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Abstract

Background: Age-related changes in the cardiovascular system occur in parallel with age-related changes elsewhere in the body. The interaction among disease, age and lifestyle requires careful analysis when interpreting a patient's complaints and altered functional capacity.

In cirrhotic patients, there are many cardiac abnormalities; early in cirrhosis, systolic performance parameters are increased while advanced cirrhosis is associated with L.V. diastolic dysfunction and increase in wall thickness.

The aim of this work was to study the altered integrated response of the heart to liver cirrhosis in older patients.

Methods: Thirty two cirrhotic patients and twenty six healthy subjects were evaluated by echocardiography (M-mode, 2D and Doppler Study) to assess the differential responses of aged hearts and young hearts to liver cirrhosis.

Results: This study had revealed a highly significant increase in EF in cirrhotic patients which becomes more evident in early stages of liver disease. There is also a significant increase in LV wall thickness and disordered diastolic junction which are more marked in advanced stages of cirrhosis when compared to the control group.

In the younger group of patients, there is a highly significant improvement in systolic performance parameters (EF & %FS), a highly significant increase in LV wall thickness and a highly significant deterioration of LV diastolic junction parameters, when compared to the younger group of control.

On the other hand, older group of patients showed a highly significant deterioration in LV diastolic filling indices but non-significant changes of systolic performance parameters and wall thickness when compared to the control group.

Conclusion: The age-related changes in the heart and peripheral vasculature alter considerably the cardiac integrated response to liver cirrhosis. While there was a significant improvement of LV systolic performance parameters in younger patients with liver cirrhosis when compared to matched age control subgroup, this is not the case of older patients in whom systolic performance improvement is absent. There was also a significant increase of LV wall thickness in the younger group of cirrhotic patients but not in the older group of patients when compared to age-matched control groups. Our study had showed a highly significant LV diastolic dysfunction in both age subgroups of cirrhotic patients when compared to age-matched subgroups of control. This means that advanced age of the patients can aggravate the deleterious effect of liver cirrhosis on LV diastolic function and vice versa.

GASTROESOPHAGEAL REFLUX DISEASE AND ITS IMPACT ON THE LARYNX AND THE PHARYNX : CORRELATIVE STUDY

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Abstract

Gastroesophageal reflux disease (GERD) is associated with extraesophageal manifestations including various otolaryngologic symptoms. The laryngopharyngeal epithelium in GERD patients is susceptible to reflux-related tissue injuries in the form of localized or diffuse laryngeal edema, opalescence and/or hypertrophy of the posterior commissure, erythema, granulation, and, sometimes, granuloma formation. Beside different investigatory tools, including endoscopy, radiological and manometric studies, the 24-hour pH esophageal monitoring is considered the "gold standard" in diagnosis of GERD patients, particularly with atypical presentations. The most widely used clinical parameter is the percentage of time that the pH is less than 4. The aim of this study is to spotlight on the possible association between different laryngopharyngeal disorders and reflux, and to correlate some of the important diagnostic findings of GERD with the laryngopharyngeal findings. Fifty patients (29 males and 21 females, with age ranging from 19 to 75 years) were included in this study.

Thirty of them presented to the gastroenterologist with typical reflux symptoms. Twenty patients were selected from those presented to the otolaryngologist with symptoms attributable to reflux and with evident reflux symptoms as well. All patients underwent complete ENT examination with special reference to prevalence of throat symptoms and, meanwhile, were examined by fiberoptic or direct laryngoscopy for documentation of signs of laryngopharyngeal affection by reflux events. Signs were put into a score according to the number of sites of mucosal affection. All patients as well underwent gastroenterological work up including upper gastrointestinal endoscopy, radiological barium studying and ambulatory 24-

hour. pH esophageal monitoring. Our results showed that dysphonia and chronic throat clearing were predominant complaints, followed by globus sensation, chronic sore throat, chronic cough, and hemming. Laryngopharyngeal examination revealed negative findings (score 0) in 4 patients, one site mucosal affection (score 1) in 13 patients, two sites (score 2) in 22 patients, three sites (score 3) in 7 patients, and four sites (score 4) in 4 patients. Sites of erythematous mucosal affections included arytenoid, interarytenoid area, postcricoid area and vocal folds. Cordal nodules had been encountered in 4 cases. The results of upper gastrointestinal endoscopy demonstrated positive data in 44 cases, whereas 6 cases were completely free endoscopically. Grade I reflux esophagitis was documented in 19 cases, grade II in 8 cases, grade III and IV in 11 and 6 cases respectively. Barium study of the 50 GERD patients displayed negative data in 4 patients. Forty-one cases showed evident reflux, 18 of them with hiatus hernia as well. However, hiatus hernia alone was evident in further 5 cases without evident reflux. The total reflux time was measured through the 24-hour pH esophageal monitoring and the acid score was normal in three out of four cases of score (0) laryngopharyngeal affection. While in all cases of score (4) laryngopharyngeal affection, acid score was pathologic. There were no statistically significant correlations between the results of both upper gastrointestinal endoscopic and radiological findings on one aspect, and the results of laryngopharyngeal scoring on the other aspect. Yet, the correlation between mean acid score and the laryngopharyngeal scoring was significant ($p < 0.05$). We conclude that reflux esophagitis has its impact on laryngopharyngeal mucosa and there is a significant correlation between the magnitude of acid score and the severity of laryngopharyngeal affection.

EVALUATION OF FHIT PROTEIN AND P27 IN NON SMALL CELL LUNG CANCER (NSCLC) : AN IMMUNOHISTOCHEMICAL STUDY

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Abstract

Aim: The present study aims at assessment of the role of Fragile Histidin Triad (FHIT) tumor suppressor gene and p27 gene in the pathogenesis of Non Small Cell Lung Cancer (NSCLC) as well as their role in the behavior of the examined cases.

Methods and Results: Fifty cases of NSCLC and 8 apparently normal lung tissues were investigated immunohistochemically for the detection of FHIT and p27 protein expression. The results showed that loss of FHIT protein expression was found in 68% of the NSCLC cases. This was significantly correlated with pathologic stage of the examined tumors ($p < 0.05$). Also FHIT expression was significantly reduced in NSCLC from smokers than it was in tumors from nonsmokers ($p < 0.05$). p27 was negative and reduced in 84% of the NSCLC cases. The results showed also an inversely proportionate correlation between p27 expression and NSCLC grade which was statistically significant ($P < 0.05$). Comparing the immunostaining results of both p27 and FHIT in NSCLCs showing that there was a highly significant positive, correlation between their expression in these neoplasms ($p < 0.01$).

Conclusion: Both p27 alteration and reduced FHIT protein expression might have an important role in the pathogenesis of NSCLC. Whether p27 alteration downregulate FUST protein expression or alteration of both p27 and FHIT protein expression are coincidental independent tumorigenic events, remains to be fully understood.

In cases of NSCLC, FHIT gene might be the target of carcinogenesis in cigarette smoke.

In. spite of the significant correlation between reduced FHTT and p27 protein expression compared with tumor stage and grade respectively, their prognostic ualue in NSCLC remains to be established.

VALUE OF SERUM INTERLEUKIN-6 IN ASYMPTOMATIC PATIENTS WITH LEFT VENTRICULAR SYSTOLIC DYSFUNCTION

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Abstract

Symptomatic congestive heart failure [CHF] is associated with high levels of cytokines including interleukin-6 [IL-6]. The role of IL-6 in asymptomatic patients with left ventricular [LV] systolic dysfunction has not been well studied. We measured the level of IL-6 in 50 patients with different left ventricular ejection fractions [LVEF] using immunoenzymes assay kits. Levels of interleukin-6 were expressed in picograms per milliliter.

They were classified into 3 groups, group 1 [control group], patients with LVEF > 55% ((20 patients)), group 2, patients with LVEF < 55 % and no clinical CHF {16 patients} and group 3, patients with LVEF < 55% and clinical CHF ((14 patients)) . Patients in group 2 had higher levels of interleukin-6 compared with patients in group 1" 8.8 ± 2.3 VS 3.6 ± 0.6 , $p < 0.05$ " Patients in group 3 had higher levels of interleukin-6 than in group 1 and group 2 [14.4 ± 6.5 vs 3.6 ± 0.6 and 8.8 ± 2.3 respectively]. There was a significant negative correlation between L.V.E.F. and level of interleukin-6 'in the three groups " $R = - 0.62$, $P < 0.002$ ".

In conclusion :- Interleukin -6 were found to be elevated in patients with asymptomatic L.V. systolic dysfunction and may reflect early inflammatory changes involved in the progression of LV. systolic dysfunction from asymptomatic to symptomatic CHF. Administration of early medical therapy to those patients may retard the progression to symptomatic CHF partly through an effect on inflammatory mediators.

SPLIT-THICKNESS CALVARIAL CRANIOPLASTY

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Abstract

Twelve patients underwent split-thickness calvarial bone grafting using high-speed drill and osteotomies for bone harvesting from June 1999 to May 2002 in two neurosurgical departments at King Abdulaziz Hospital and Oncology Center in Jeddah, and King Fahd Hospital in Al-Madinah, Saudi Arabia. These patients were reviewed to show the indications and advantages of the procedure. All patients were studied pre-operatively with computed tomographic scans and skull plain X-ray films. The follow-up period ranged from 1 to 22 months. All patients had survived functional bone graft. There were no major intra-operative complications, postoperative infection or remarkable sequelae. In 2 patients intraoperative dural tears occurred and were repaired without any postoperative cerebrospinal fluid leak or sequelae. Results showed that patient's own calvarial bone graft provides an excellent and alternative solution for skull bone defects with all the immediate and long-term biological advantages that come with using autogenous tissues.

Keywords: Cranioplasty - split-thickness calvarial graft: - autogenous bone graft- skull bone defect

FETAL - PELVIC INDEX AS A PREDICTOR OF VAGINAL DELIVERY AFTER PREVIOUS LOWER SEGMENT CESAREAN SECTION

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Abstract

Objective: To evaluate the predictive value of the fetal-pelvic index for successful vaginal delivery after previous lower segment cesarean section.

Methods: Ninety women with previous one lower segment cesarean section were included in the study. Pelvimetry was performed to measure maternal pelvic inlet and mid-cavity circumferences at 37 weeks gestation. Ultrasound was performed to measure fetal head and abdominal circumferences at 38 weeks gestation. Then fetal-pelvic index was derived. The predictability of fetal-pelvic index in prediction of outcome of delivery was calculated.

Results: Fifty eight (64%) women delivered vaginally and 32 (36 %) required cesarean section. Twelve women with positive fetal-pelvic index had repeated cesarean section. The predictability of positive fetal-pelvic index was 52.2% (12/23) whereas the predictability of negative fetal-pelvic index was 70.1% (47/67).

Conclusions: Fetal-pelvic index has low predictive value for successful vaginal delivery after previous one lower segment cesarean section.

ENDOSCOPIC EVALUATION OF THE RHINOSTOMY SITE FOLLOWING EXTERNAL DACRYOCYSTORHINOSTOMY

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Abstract

Purpose: To assess the dimensions and patency of the surgical fistula after external dacryocystorhinostomy (DCR) using rigid fibroptic intranasal endoscope.

Methods: This prospective study included 20 primary external dacryocystot rhnostomy in 20 patients with nasolacrimal duct obstruction. The dimensions of the fistula were measured intraoperatively, after surgery endoscopic assessment and endonasal photos of the ostium were taken 1 month and 6 months post operatively.

Results: Subjective results show that the symptomatic success was 90%, 10% were unchanged. The objective results based on irrigation and the functional endoscopic dye test (FEDT). The irrigation was patent on 85% of cases , The results of FEDT were positive in 80% of cases , endo-nasal inspection of the rhinostomy site of patients with a negative FEDT showed that scarring accounts for these 4 cases. Perirhinostomy granuloma was observed in 2 patients.

Conclusion: Intranasal abnormalities as , synechiae formation between the middle turbinate and the DCR site, excessive scar formation between the nasal septum and DCR site and perirhinostomy granulation tissue formation are the most common cause of dacryocysto- rhinostomy failure. The nasal endoscopy facilitates recognition of these abnormalities and provides photo documentation to guide the surgeon to the appropriate post operative management.

PREDICTORS OF ATRIAL FIBRILLATION DEVELOPMENT IN PATIENTS WITH MITRAL VALVE PROLAPSE

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Abstract

Mitral Valve Prolapse (MVP) syndrome is one of the most prevalent cardiac valvular abnormalities. In this study we investigated the predictors of atrial fibrillation (AF) prevalence in patients with MVP.

Eighty three adult patients with echocardiographic diagnosis of MVP were subjected to the following :-

- Full history taking and thorough clinical examination.*
- Electrocardiography on two occasions in at least six weeks apart to select patients with chronic AF.*
- M mode, 2-dimensional color Doppler transthoracic echocardiography were done for all patients.*

Sixty two patients had sinus rhythm and twenty one patients had chronic AF. There was no difference in sex, hypertension, diabetes mellitus, smoking and hypercholesterolemia between sinus rhythm and AF groups. Except for age, patients with AF were significantly older than those with sinus rhythm.

The left atrial diameter and left ventricular end-diastolic dimension in the AF group were greater than those in sinus rhythm group. Mitral regurgitation (MR) in the AF group was more severe than in the sinus rhythm group. There was no difference in fractional shortening between the sinus rhythm and AF group. In conclusion, the degree of MR, the site of MVP and left atrial diameter were independent predictors of AF prevalence in patients with MVP.

**EFFECT OF HEALTH EDUCATION AND
EXERCISE TRAINING ON KNOWLEDGE,
ATTITUDE. PRACTICE AND SOME
PARAMETERS IN TYPE 1
DIABETIC PATHIENTS**

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Abstract

Diabetes mellitus is considered now as a public health problem and is well known to result in multiple organ dysfunction with increased morbidity and mortality rates. Aim: This work carried out to study the role of patient education on diabetic control through improving knowledge, attitude and practice of type 1 diabetic patients towards the disease. Also to evaluate the persistent effects of exercise training program on some endothelial function parameters in type 1 diabetic patients. Subjects and methods: The study included 20 male patients with controlled type 1 diabetes of 14.1 ± 5.4 years duration aged 29.8 ± 6.3 years and age-matched control group including 20 healthy male subjects. All cases and controls subjected to questionnaire about the KAP towards the diabetes at baseline and after 4 months and 8 months of health education program. Plasma thrombo modultn (T.M) a marker of endothelial damage, daily insulin dose, glycosy lated hemoglobin (HbA1c)- total cholesterol (total-c). LDL-cholesterol fLDL-Q HDL-cholesterol (HDLi-C) and triglycerides were assessed at baseline (for patient and controls), after 4 months of regular exercise, and 8 months alter cessation of exercise in type 1 diabetic patients. Results: At baseline. patients with type 1 diabetes compared to controls showed significant in crease in plasma TM (53.4 ± 12.1 us $25.3 \pm 9.6 \mu\text{g/L}$. $P < 0.001$). also the knowledge and attitudes of patients were significantly higher than controls. After 4 and 8 months of health education program, there

was a significant improvement in patient knowledge, attitude and practice towards all items of the disease except smoking stoppage there was no significant change. Exercise training resulted in significant decrease in daily insulin dose, total-C, LDL-C and increase in HDL-C concentrations (43.2 ± 5.3 Vs 54.6 knowledge and attitudes of patients were significantly higher than controls. After 4 and 8 months of health education program, there was a significant improvement in patient knowledge, attitude and practice towards all items of the disease except smoking stoppage there was no significant change. Exercise training resulted in significant decrease in daily insulin dose, total-C, LDL-C and increase in HDL-C concentrations (43.2 ± 5.3 Vs 54.6 ± 4.8 U/day. $P < 0.001$; 195.4 ± 7.7 Vs 208.5 ± 11.4 mg/dl. $P = 0.007$; 116.4 ± 6.2 Vs 133.4 ± 8.1 mg/dl, $P < 0.001$; 64.3 ± 4.1 Vs 57.8 ± 3.7 mg/dl. $P < 0.001$, respectively).

Also, exercise training resulted in significant improvement of endothelial function characterized by significant decrease in plasma TM (33.6 ± 7.2 Vs 53.4 ± 12.1 / $\mu\text{g/L}$. $P < 0.001$). However, the beneficial effects of exercise were abrogated 8 months after cessation of exercise. Conclusion: Our study demonstrates that health education of diabetic patient improve their knowledge, attitude and practice towards diabetes and its management. Also, aerobic exercise training can improve endothelial function in diabetic patients, who are at considerable risk for diabetic angiopathy. However, this beneficial effect on vascular function is not maintained after cessation of exercise. Emphasis should be placed on factors that result in permanent life style changes and encourage a lifetime of physical activity. 4.8 U/day. $P < 0.001$; 195.4 ± 7.7 Vs 208.5 ± 11.4 mg/dl. $P = 0.007$; 116.4 ± 6.2 Vs 133.4 ± 8.1 mg/dl, $P < 0.001$; 64.3 ± 4.1 Vs 57.8 ± 3.7 mg/dl. $P < 0.001$, respectively).

**Q-T INTERVAL PROLONGATION IN
CIRRHOSIS : RELATIONSHIP WITH
SEVERITY AND ETIOLOGY OF LIVER
DISEASE AND AGE AND GENDER
OF THE PATIENTS**

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Abstract

Background : Q-T interval prolongation may provide the substrate for ventricular arrhythmias. This alteration is a predictor for serious arrhythmias and sudden death in both congenital and acquired conditions and has been shown to occur in alcoholic liver disease and cirrhotic patients who are candidates /or liver transplantation.

Aim : The aim of this work was to study the impact of liver cirrhosis on Q-T interval duration and to assess if there is any relation between this prolongation and etiology and severity of liver cirrhosis or age and gender of the patient.

Methods: Twenty-nine cirrhotic patients without overt heart disease and 13 healthy subjects were enrolled. Rate-corrected Q-T interval (Q-Tc) was assessed along with routine liver tests and Child-pugh score.

Results : Q-Tc was significantly prolonged in patients with. cirrhosis when compared to the control subjects. This effect was not influenced by the etiology of liver cirrhosis nor by the age of the patients, but the Q-Tc prolongation was worsened in parallel with the severity of liver disease and also in female patients when compared to male gender.

Conclusion : Liver cirrhosis has a lengthening effect on Q-Tc i.e. it causes a significant prolongation of Q-Tc. This prolongation parallels the severity of liver disease regardless the etiology of liver cirrhosis. Gender [of patients is an important confounding factor (Q-T prolongation is more evident in females) while age of the patients has no definite role on Q-Tc prolongation in cirrhotic patients.

TUNICA ALBUGENIA PLICATION FOR CORRECTION OF CONGENITAL PENILE CURVATURE : SIMPLIFIED APPROACH

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Abstract

Objectives. To evaluate the long term results of simplified tunica, albugenia plication/or correction of congenital penile curvature in adults.

Patients and methods. Twenty patients with congenital curvature of the penis have undergone surgical correction . Patients aged 16-48 years (mean 27 years) . Ninteen patients had a congenital ventral and one patient had ventrolateral penile curvature. The angle of ventral bending was approximately 35- 90° (mean 65°). Full history taking and physical examination were done. Erection was induced by intracavemosal injection of 15 micrograms of prostaglandin E₁; to assess all directions of penile curvature and to determine the angle of deviation. The course of the neurovascular bundles is determined without dissection. 2/0 polypropylene plicating sutures are taken through full thickness of the tunica albugenia. 2-3 pairs of longitudinal plication sutures are placed both sides of the neurovascular bundles avoiding injury of circumflex veins. Plication stitches were parallel to assure symmetrical adjustment of the curvature. Patients were discharged after 16-24 hours and visited outpatient clinic weekly for 8 weeks. Then. they had been contacted once per year. Patients were followed up for 2-9 years

Results. Successful outcome was achieved in 19 (95%) patients. The penis becomes straight during full and rigid erections and patients are satisfied with penile cosmetic feature and sexual intercourse. Non of patients complaining of significant shortening of erected penis. Recurrence of curvature occurred in one patient due to excessive and rigid erections early postoperatively. Three patients complained of discomfort sensation

of the palpable knots of polypropylene sutures. In only one patient the knots has been removed under local anesthesia 1.5 years after corrective surgery due to discomfort during sexual intercourse. Operative time ranged between 60 to 100 minutes.

Conclusion. The present technique of tunica ablucenia plication is simple, easy and not time consuming. It avoids the complications of dissection and mobilization of the neurovascular bundles. Slight shortening of the penis -s a disadvantage of the technique, however, it does not interfere with sexual satisfaction.

PERINEAL RADICAL PROSTATECTOMY : RATIONALE AND EARLY COMPLICATIONS AMONG 520 PATIENTS

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Abstract

Background and Aim; Perineal prostatectomy offers an alternative to the retropubic one with less morbidity and complication rate in a selected group of patients. We report our experience on 520 cases with respect to patient selection, intra- and early postoperative complications within the first 3 months after surgery.

Material and Methods: Between October 1996 and December 2001, a total of 520 perineal radical prostatectomies were performed. The patients average age was 65 years (range 42-79) with the preoperative PSA of 0.5 to 37ng/dl (mean 7.1 ng/dl). The clinical stage was T1a, T1b, T1c and T2 in 2.5%, 1.5%, 53% and 43% respectively while the Gleason score was below 7 in most of the cases.

Results: The mean operative time was 116 minutes (range 50-300) and the intraoperative blood loss ranged from 50-2800ml (mean 500ml) with 6.7% blood transfusion rate. Histopathology of the removed prostate revealed PT0, PT2 and \geq PT3 in 1.5%, 74% and 24.5% respectively with the overall positive surgical margin of 15%. Rectal injury was inflicted in 3.6% of cases that was managed conservatively in all but one. Urinary leakage occurred in 22 cases (4%) and surgical intervention was necessary only in 3 cases.

Acute urinary retention developed in 5.5% of cases and was managed conservatively by cystostomy and antiphlogestics. Nevertheless, anastomotic strictures occurred in 15 patients (2.8%) and all were treated endoscopically.

Acute epididymitis was diagnosed in 13 patients, two of them needed orchiectomy because of abscess formation. Neurapraxia of lower extremity was noticed in 4 patients which resolved completely within a week.

Conclusion: Radical perineal prostatectomy offers a good alternative for surgical treatment of prostatic cancer in a selected group of patients.

Not only the shorter hospital stay, low blood loss, operative time are in favor of the procedure but also the low morbidity rate and early convalescence are most advantageous. However, longer follow up and prospective comparative data need no emphasis to assess its efficacy in terms of cancer control, late complications and patient survival.

VISCOCANALOSTOMY. A PROSPECTIVE TWO YEAR FOLLOW-UP STUDY

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Abstract

Aim: To prospectively study the success rate and complications of the non-penetrating glaucoma surgery, viscocanalostomy.

Methods: 31 eyes of 31 patients who had medically uncontrolled primary open angle glaucoma were enrolled in this prospective study, in which viscocanalostomy was performed on all patients with injection of viscoelastic (HEALON) in the surgically de-roofed Schlemm's canal and in the scleral bed, the superficial scleral flap was sutured and the conjunctiva tightly closed. Intraocular pressure, visual acuity, and visual field analysis were performed post operatively and recorded

Results: The Patients in this study were followed-up for a mean period of 21.2 months. The mean preoperative intraocular pressure (IOP) was 26.4 mmHg and the mean IOP on the first postoperative day was 8.4 mm Hg and 18.5 mmHg at the end of follow-up period (24 months). 67% of patients in this study achieved an IOP below 20 mmHg without medication (complete success), 7 patients, 22.5% required medical treatment to achieve an IOP of < 20mmHg. while 3 patients, 9.6% required further surgical intervention to control their IOP.

Conclusion: Viscocanalostomy may be a good and promising surgical approach for glaucoma patients.

**COMPARATIVE STUDY OF KETOROLAC.
MEPERIDINE AND TRAMADOL ADDED TO
LIDOCAINE FOR INTRAVENOUS
REGIONAL ANAESTHESIA**

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Abstract

Intravenous regional anaesthesia (IVRA) provides safe and effective anaesthesia for upper limb surgery of one-hour duration or less.

We studied the effect of addition of ketorolac, tramadol and meperidine to lidocaine for IVRA in upper limb on haemodynamic, biochemical and electrolyte changes, duration of postoperative analgesia (minutes), and side effects of the injected drugs .

Sixty patients divided into 3 groups 20 patients each, received either 20 mg ketorolac (KL), 30 mg mependine (ML), or 50 mg tramadol (TL) added to 200 mg lidocaine 0.5% for IVRA of the upper limb. We evaluated haemodynamic changes (mean arterial blood pressure MABP mmHg & heart rate HR b/min.), biochemical and electrolyte changes (serum lactate mmol/L.) and (serum potassium mmol/L.), duration of postoperative analgesia (minutes), and side effects of the injected drugs.

We found that MABP and HR significantly increased after tourniquet application and significantly decreased after tourniquet deflation. Serum lactate and serum potassium significantly increased immediately after tourniquet deflation. Considerable prolonged postoperative analgesia time in KL and ML groups compared to TL group. Postoperative side effects included skin rash, painful or burning sensation at the injection site . Nausea and vomiting occurred with ML and TL groups.

We conclude that addition of ketorolac 20 mg to lidocaine produces prolonged postoperative analgesia time without side effects. Meperidine in dose of 30 mg added to lidocaine produces prolonged postoperative analgesia time with side effects, whereas addition of 50 mg of tramadol

to lidocaine does not prolong postoperative analgesia time with occurrence of some side effects.

Keywords: NSAIDs, Ketorolac, Narcotic analgesics, Meperidine, Tramadol, Anaesthesia techniques. Intravenous regional anaesthesia. Local anaesthesia, Lidocaine.

LIMBAL CONJUNCTIVAL AUTOGRAFT VERSUS MITOMYCIN C IN RECURRENT PTERYGIUM

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Abstract

Purpose : To evaluate limbal conjunctiva! autograft and mitomycin C as two recent ways in management cases with recurrent pterygium.

Methods : Twenty two cases of recurrent pterygium had previously been treated by simple excision, are included in this study the first group A Fourteen eyes were treated by limbal conjunctival autograft, and the second group B eight eyes were treated by simple excision with intraoperative application of mitomycin C 0.2 mg/ml for 3 minutes.

Results : The follow up period ranged from 6-12 months, two recurrences were observed in the first group and one in the second group.

Conclusion : Both techniques are successful in management cases with recurrent pterygium but longer follow up is necessary to determine safety of mitomycin C.

INTERLEUKIN-1 β (IL-1 β) AND INTERLEUKIN-6 (IL-6) IN GINGIVAL CREVICULAR FLUID OF CHRONIC PERIODONTITIS PATIENTS

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Abstract

The local host response to periodontitis has been studied by biochemical analysis of gingival crevicular fluid (GCF). The primary cytokines that have been identified in chronic inflammation include interleukin-1 alpha (IL-1 α), interleukin-1 beta (IL-1 β) and interleukin-6 (IL-6). The aim of the present investigation was to determine IL-1 β and IL-6 levels in the GCF of periodontally healthy and chronic periodontitis patients. The gingival crevicular fluid (GCF) Interleukin-1 beta (IL-1 β) and Interleukin-6 (IL-6) were measured in 28 patients with chronic periodontitis, 23 periodontally healthy individuals. Chronic periodontitis group had significantly higher IL-1 β levels and IL-6 as compared to healthy controls ($P < 0.05$). There was a statistically significant positive correlation ($P < 0.05$) between the levels of these mediators and all the clinical parameters (gingival index, attachment level and probing depth). Thus, periodontal tissue destruction was associated with increased levels of IL-1 β and IL-6. Furthermore, there was a significant positive correlation ($P < 0.05$) between GCF IL-1 and GCF IL-6 in the patient groups which suggest that these inflammatory mediators might play an important role in pathogenesis of the periodontal diseases. In conclusion, GCF IL-1 β and GCF IL-6 may be considered as a potential risk markers for chronic periodontitis patients.

LONG-TERM FOLLOW-UP OF AHMED GLAUCOMA VALVE IMPLANTATION IN MANAGEMENT OF UVEITIC GLAUCOMA

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Abstract

Purpose: To evaluate the safety and efficacy of Ahmed glaucoma valve implantation for the management of glaucoma associated with chronic uueitis.

Methods: Twenty jwe patients(31 eyes)with chronic anterior uueitis underwent Ahmed glaucoma valve implantation for uncontrolled glaucoma between July 1996 and November 2002. All patients had their uueitis controlled before surgery via immunomodulatory therapy which was continued in the early postoperative period for good control of inflammation. The intraocular pressure (IOP) was measured , the number of anti-glaucoma medications required to achieve the desired IOP and the visual acuity were recorded and complications associated with the surgery were monitored.

Results: The follow-up period ranged from 7 to 53 months (mean 27.4 ± 3.12 months). At the most recent visit, intraocular pressure was reduced from a mean of 38.9 ± 3.43 mmHg (range 28-52mmHg) to 12.19 ± 2.16 mmHg (range 8-18 mmHg).

The average pressure reduction after Ahmed glaucoma valve implantation was 26.71 mmHg. The average number of antiglaucoma medications required to achieve the desired IOP was reduced from an average of 3.32 ± 0.68 (range 2-4) before surgery to an average of 0.64 ± 0.73 (range 0-2) after surgery. Surgery was considered a success if intraocular pressure (IOP) was less than 21 mmHg and greater than 4 mmHg . with or without antiglaucoma medications, without additional glaucoma surgery, and without loss of light perception at the most recent postoperative-

visit. Success was achieved in 26 of 31 eyes (83.87 %).

At the most recent postoperative visit .visual acuity improved in 10 eyes , was the same in 19 eyes.and decreased in 2 eyes /rom 4/60 to 3/60 (eye No.8) and /rom 5/60 to 4/60(eye No.29).

Conclusions: Ahmed glaucoma valve implantation can be an effective and safe method in the management of uveitic glaucoma. The control of the patients' uveitis, through preoperative and postoperative immunomodulatory therapy, may have contributed to the success rate reported.

SOME AQUEOUS HUMOUR BIOMARKERS IN PRIMARY ADULT GLAUCOMAS COMPARED TO SENILE CATARACT

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Abstract

Proinflammatory cytokines such as interleu.kin.-6 (IL-6) and tumor necrosis factor alpha (TNF- α) -mediate induction of nitric oxide synthase II (NOS ID leading to production of large amount of nitric oxide (NO). NO might play a crucial role in regulation of intraocular pressure (IOP), physiologically and in ocular diseases such as glaucoma. The present study aimed to assess TNF- α , IL-6 and NO levels in serum and aqueous humour in patients with glaucoma.

Subjects and methods: Thirty patients with primary adult glaucoma and twenty patients with senile cataract of matched age and sex were enrolled in the present study. Patients were recruited from Mansoura University Ophthalmic Center. They were classified into 3 groups; Group I comprised 20 patients with senile cataract, group II comprised 14 patients with primary open angle glaucoma (OAG) and group III comprised 16 patients with acute angle closure glaucoma (ACG). At the time of elective surgery, aqueous humour samples (comeal paracentesis) were obtained. Simultaneously, venous blood samples were collected and non haemolysed sera were separated. Aqueous humour and serum samples were kept frozen till time of TNF- α and IL-6 (EUSA) and NO (colorimetric determination).

Results: There were non significant changes in serum levels of TNF- α , IL-6 and NO in the three studied groups. However, these parameters were significantly elevated in aqueous humour of eyes with glaucoma compared to the corresponding value of eyes with senile cataract and the elevation was more marked in ACG compared to OAG. Moreover. NO levels were correlated with TNF- α and IL-6 in aqueous humour of eyes with glaucoma.

Conclusions' Serum TNF- α , IL-6 and NO in serum did not change in different types of glaucoma while these parameters were increased in aqueous humor of eyes with glaucoma than their respective values in eyes with senile cataract. These results indicate that increased levels of these items in aqueous humor of glaucomatous eye may originate from accelerated intraocular synthesis rather than systemic circulation. Moreover, the elevated levels of the proinflammatory cytokines (TNF- α , IL-6) and NO might have a role in pathogenesis of glaucoma.

**BIOCHEMICAL EVALUATION OF SOME
IMMUNOLOGICAL AUTOANTIBODIES IN
LATENT AUTOIMMUNE DIABETES
OF ADULTS (LADA)**

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Abstract

The term. LADA (latent autoimmune diabetes in adults) has been introduced in 1994 to define adult diabetic patients who are initially non-insulin requiring but with immune markers of type 1 diabetes and progress to insulin dependency. Patients with this type of diabetes who progress to insulin treatment have several features of type 1 diabetes including low or normal body weight; antibodies to glutarnic acid decarboxylase (GAD) and islet cells antibodies (ICA) antibodies. The aim of our study was to evaluate the serum levels of c-peptides and the pattern of auto antibodies to GAD and ICA in patients with (LADA). We measured the serum levels of these biochemical parameters in 72 diabetic patients and. 10 healthy subjects as a control group using (ELJSA). Non-Fasting C opeptide was significantly lower in diabetics than control subjects, while GAD-Ab & ICA levels were significantly higher in diabetics than control subjects (P value was 0.004, 0.001&0.006) respectively. The prevalence of single GAD-Ab positivity in our patients with LADA was more than single ICA positivity(GAD-Ab 55.6%, ICA 13.9% & 11.1% for both).

Our data showed also that there were significant inverse correlations between GAD Ab, ICA and non-fasting C. peptide ($p < 0.001$, 0.044 respectively). From this study we concluded that detection of LADA at the time of diagnosing diabetes is important because, initiation of intensive insulin therapy may protect the remaining functioning cells from further immune destruction by decreasing their activity. This in turn might lead to easier-

glycemic control with less hypoglycemia and less complication. The pattern of serum non fasting C.peptide , GAD Ab and ICA could be considered as an early predictor ofLADA and evaluation of their levels must be put in consideration.

**USE OF LABORATORY BONE MARKERS AND
DENSITOMETRY IN EVALUATING BONE
LOSS IN RENAL TRANSPLANT
RECIPIENTS TREATED WITH
ACTIVE VITAMIN D**

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Abstract

Background/Aim: Very rapid bone loss, osteopenia and osteoporosis have been documented in the first 6 to 12 months after renal transplantation. We aimed to investigate the effect of treatment with active vitamin D on the prevention of post transplantation bone loss:

Methods: Forty adult male recent renal transplant recipients were enrolled into the study. Patients were randomized into 2 groups; group I received daily alfacalcidol 0.5 p.g PO, and Group II received placebo and considered as control group. Every patient in both groups was supplemented with daily 500 mg calcium carbonate. Parameters of bone metabolism as well as Bone mineral density (BMD) measured at 3 sites were done before and after study period.

Results: BMD was increased by 2.1%, 1.8%. 3.2% at lumber spine, femoral neck, forearm, respectively in group I while it decreased by 3.2%. 3.8%. 1.8% at the same sites, in control group ($p < 0.05$). iPTH level decreased significantly in group I. compared to control group ($p = 0.003$).

Apart from transient hypercalcaemia in 1 patient in group I. no other significant adverse effects were noted.

Conclusion: This study proves that early bone loss that occurs during the first 12 months after renal transplantation could be prevented by alfacalcidol. Use of alfacalcidol early after transplantation is safe and tolerable.

VALUE OF MAGNETIC RESONANCE IMAGING IN DIAGNOSIS OF EWING SARCOMA OF BONE

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Abstract

This study was designed to evaluate the diagnostic value of MRI in comparison to plain X-ray examination in cases with Ewing sarcoma (ES) and comprised 7 patients (5 males and 2 females) with pathologically proved ES with a mean age 16.6-6.5; range 8-25 years. The study protocol started with a coronal or axial and sagittal T1W, T2W. T1 postcontrast, T2 with STIR imaging and dynamic MRI contrast study was performed for 2 patients. Four patients had ES of long bones and 3 patients had ES of flat bones. All long bone lesions were of low signal intensity on T1WI but showed high signal intensity on T2WI. The sclerotic areas could be easily depicted as very low signal intensity on T1 and T2WI and the cortices were seen invaded in all cases, and periosteal reaction was depicted in 3 cases. Extraosseous soft tissue masses are seen in all cases, invasion of the neurovascular bundles was detected in one case and displacement in another case. In cases of ES of flat bone, MRI study showed that the sacral lesion was extending to the sacral canal, nerve roots, sacral foramina; the left iliac bone lesion was seen extending to the left alium of the sacrum and the left sacroiliac joint. Periosteal reaction was seen in one case. All lesions displayed low signal intensity on T1WI, high signal intensity on T2WI with heterogeneous enhancement. Extraosseous soft tissue masses, cortical invasion and joint involvement were seen in all cases. Plain X-ray could detect local extensions of ES with accuracy rate of 66.6% and no case was missed depending on MR imaging. It could be concluded that MR imaging of cases with Ewing sarcoma is advantageous for preoperative assessment and identification of soft tissue extensions and joints and neurovascular involvement.

**NON-SURGSCAAL TERMINATION OF THE
SECOND TRIMESTER MISSED ABORTION AND
INTRAUTERINE FETAL DEATH USING
MISOPROSTOL AS A SINGLE AGENT**

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Abstract

Objectives: To assess the efficacy and safety of misoprostol (cytotec) as a single agent in the termination of second trimester missed abortion and intrauterine fetal death.

Material and method: During the period between January 2000 till the end of October 2002, fifty-four cases of second trimester missed abortion and intrauterine fetal death were terminated using misoprostol as a medical abortifacient agent. The rate of complete and incomplete abortion was calculated. The need for Dilatation and Curettage (D&C) following Misoprostol induced abortion was reported. Complications including blood loss. Neonatal Intensive Care Unit (ICU) admission, infection and prolonged hospitalization were calculated.

Results: Of the 54 cases 48 (89%) aborted. 6 (11%) failed to respond and needed surgical evacuation. Thirty-two (59%) ended by complete abortion, two cases (3.7%) had complete abortion after the administration of Nalador (Sulprostone) and 20 (37%) patients had an easy uncomplicated surgical evacuation for incomplete abortion. The average length of hospital stay was 2.1 days. There were no major complications. None of the cases had repeated (D&C) for retained product after 3 month of follow up.

Conclusion: Misoprostol can be utilized safely and effectively as a single agent in the termination of the second trimester missed abortion and intrauterine fetal death to avoid the risks of surgical evacuation and reduces the incidence of repeated (D&C) that is usually associated with missed abortion. It is cheap and cost effective in areas where medical care cost is a major concern.

Key Words: Medical termination, Missed abortion, Misoprostol. Intra-uterine fetal demise.

GRAND-GRAND MULTIPARA : THE TRUTH BEHIND THE RED FLAG

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Grand-Grand Multipara: The Truth behind the Red Flag, Egypt*

Abstract

Objectives: To evaluate the complications associated with grand-grand multiparus (para 10 or more) including perinatal, peripartum, intrapartum and neonatal complications (Mortality and Morbidity), by comparing the outcome of pregnancies in grand-grand multiparus women with parity of 10 or more to a controlled group of multiparus women parity of(1 -9) in a population with high rate of unbooked deliveries.

Material and Methods: At the Maternity and Children Hospital in Makkah, Kingdom of Saudi Arabia in the period between (Beginnings of July-end of December 2002), 202 women who had had 10 previous deliveries or more were identified and compared with group of 4487 women whose parity ranged (1 -9) delivered at the same institution at the same period of time. The two groups were comparable in age and in booking status. A comparative analysis of the data from both groups conducted. The two groups were compared in the outcome including maternal antepartum, intrapartum and postpartum complications. The neonatal outcome was recorded and compared between the two groups.

Results: The perinatal mortality in the study group was (49.5:1000) and 24:1000 in the control group. The rate ofcesarean section was 20.9% in-group 1, compare to 13% in the controlled group. There was no difference between the two groups in the rate of instrumental deliveries (ventouse and forceps), multiple pregnancy, malpresentation, dysfunctional

labor, low birth weight, macrosomia and preterm labor. In the study group, 30% had had medical complication compared to 15% in the control group. The incidence of placental events was 2 % in-group 1 and 0.5% in-group. There was significant increase in the incidence of postpartum hemorrhage in the study group (13.6%) compared to 5% in the control group. There was no difference between the two groups in the incidence of congenital anomalies and NICU admission. Apgar score at 1.5 and 10 minutes was comparable in the two groups. There was no difference in the puerperal complications or the length of hospitalization following the delivery.

Conclusions: Extreme parity should be treated with extra-care and should be considered as high-risk pregnancy particularly in populations with high rate of unbooked deliveries. Our study demonstrated that there is an increase in the perinatal mortality, the rate of cesarean section, antenatal maternal complications and the incidence of postpartum hemorrhage in this group compared to a control group from the same population.

Key words: Grand-grand multiparity, perinatal mortality, unbooked deliveries.

INFECTIOUS COMPLICATIONS AFTER TYPE I FEMALE GENITAL MUTILATION

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Abstract

Female genital mutilation (FGM) is defined as procedures that involve partial or total removal of the female external genitalia and/or injury to the female genital organs for cultural or any other non-therapeutic reasons.

The objective of this case series was to report the occurrence of vulval sepsis and abscess following Sunna circumcision.

Complications following FGM include hemorrhage, pain, infection, urinary retention, death, scarring and keloid formation, vulval epidermoid cysts, vulval abscess, recurrent urinary tract infection, psychological effects (flashbacks, anxiety and depression), sexual problems, and obstetrical sequelae.

The publication of this paper will encourage others to document other complications of Type I FGM. This will constitute the initial medical basis to support banning Type I FGM by the religious authorities.

OUTCOME OF INDUCTION OF LABOR AFTER THREE DOSES OF PROSTAGLANDIN-E₂

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Abstract

Objective: To assess the outcome of induction, a/labor after three doses of prostaglandin-E₂ (PGE₂).

Materials and Methods: The hospital records of all the women who had induction of labor at King Fahad Armed Forces Hospital in Jeddah.

Saudi Arabia, between January 1, 1999 to December 30, 2000 were retrospectively reviewed and analyzed. Women who received PGE[^] for cervical ripening were identified. The outcome of labor of women who received more than three doses of PGE[^] (dinoprostone: Prostin["] E₂ three mg tablet) were compared to the outcome of women who received three or less doses of PGE₂.

Results: During the study period, there were 7882 deliveries. 6936 (87.8%) women delivered vaginally and 886 (11.2%) women delivered by cesarean section. 261 (3.3%) women received dinoprostone for preinduction cervical ripening. There were no statistically significant differences between women who received more than three doses of dinoprostone and women who received three or less doses of dinoprostone in age, gravidity, parity, gestational age at delivery. Bishop score, duration of second and third stages of labor, mode of delivery, blood loss, Apgar scores at 1 and 5 minutes, fetal weight, and number of days of hospitalization of the baby. There were statistically significant differences in the induction time, duration of the first stage of labor, and number of days of hospitalization of the mother. Conclusion: The use of more than three doses of dinoprostone for induction of labor is a valid option to avoid cesarean section. Further studies are needed to confirm our finding.

RISK STRATIFICATION OF PATIENTS WITH BLEEDING OESOPHAGEAL VARICES : A PROSPECTIVE STUDY

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Abstract

Oesophageal varices commonly develop in patients with liver cirrhosis, and bleeding from varices is an important cause of morbidity and mortality in these patients. UGJT endoscopy allows accurate risk stratification of patients presenting with bleeding oesophageal varices. however, it is not immediately available. Thus, initial management of patients depends on non-endoscopic information. Therefore, we searched to risk stratify patients with bleeding oesophageal varices using variables available at the emergency room This prospective study included 271 patients admitted to GIBU with bleeding oesophageal varices. Their mean age was 51.7 years \pm 24.0 (range 13-90 years), the majority were males (n = 235; 86.7%), and Saudi nationals comprised 144 (53.1%) patients. Inhospital complications developed in 84 patients and included rebleeding in 54 (19.9%), hepatorenal syndrome in 24 (8.9%), SIRS in 32 (11.9%), neurological failure in 38 (14 %), and ARDS in 10 (3.7%) patients. Emergency surgical intervention was required in 29 (10.7%) patients. The inhospital mortality was 45 (16.6%) patients, and the overall adverse outcome developed in 90 (33.2%) patients. All patients underwent UGJT endoscopy, and were evaluated for an adverse outcome. An adverse outcome was defined as death, the need for operative intervention, and the occurrence of complications as rebleeding, mono or multiple organ failure, development SIRS or ARDS. A good outcome was defined as a patient who discharged alive, with no need for any operation, and without inhospital complication. Univariate analysis identified 21 variables associated ($P < 0.05$) with an adverse outcome. Unconditional logistic regression analysis identified three

independent predictors for adverse outcome (P <0.05): admission SBP \leq 100 mmHg, the presence of encephalopathy, and blood transfusion \geq 5 units. We derived a decision rule based on patients having 0-3 of these independent predictors. This decision rule identified a large group of patients with a \leq 10 % chance of an adverse outcome. We concluded that risk stratification is possible from information available at the time of initial presentation which can be used to identify patients who require a less intensive level of care thereby, conserving resources without compromising patients outcomes.

Key words: oesophageal varices ; adverse outcome ; good outcome ; rebleeding ; mortality.; risk factors. **Abbreviations:** Upper gas trointestinal tract (UGIT), Gastro intestinal bleeding unit (GIBU), Systolic blood pressure (SBP), Diastolic blood pressure (DBF), Adult respiratory distress syndrome. (ARDS), Systemic inflammatory response syndrome (SIRS).

ANAL SPHINCTER FUNCTION FOLLOWING ASSISTED VAGINAL DELIVERY

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Abstract

Objective: To assess anal sphincter junction following forceps and vacuum assisted vaginal delivery .

Methods: The study included 64 primiparous women with indicated instrumental delivery. The women included in the study were randomized to either a vacuum or low forceps assisted delivery. Follow up consisted of clinical evaluation, anal manometry and endoanal ultrasound at three months post partum

Results: Thirty women delivered with forceps and 34 with vacuum assistance. There were no statistical differences in the antecedent ante natal factors between both groups. A third degree perineal tear followed 5 (17%) forceps and 2 (6%) vacuum deliveries. There were 18(60%) women complained of altered faecal continence after forceps delivery compared with 11(32%) following vacuum delivery three months post partum (RR 2.76, 95% CI 1.39-5.77). Endoanal ultrasound was reported as abnormal following 16(53%) forceps deliveries and 15(44%) vacuum deliveries (RR 1.2, 95% CI 0.64-2.61). Median anal canal resting pressure was significantly lower following forceps delivery compared with vacuum delivery.

There were no significant differences in degree of ultrasound abnormality between the two groups.

Conclusions: Based on continence outcome, vacuum should be preferred than forceps in assisted delivery as symptoms of altered faecal continence are significantly more common following forceps delivery.

CORNEAL ASTIGMATISM BEFORE AND AFTER PTERYGIUM EXCISION

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Abstract

Purpose: to assess the effect of pterygium excision on corneal astigmatism by using orbiscan corneal topography.

Patients and Methods'.In this study 20 eyes of 20 patients complaining of primary pterygium. AR patients were subjected to preoperative full ophthalmic examination and Orbiscan corneal topography was done preoperative then repeated one week and 8 weeks postoperative. The amount of astigmatic changes were recorded.

Results: mean preoperative astigmatism 3.72 ± 3.1 was reduced to 1.41 ± 0.95 eight weeks postoperative. A linear correlation between pterygium size and amount of astigmatism was found.

Conclusion: our study showed that the corneal refractive astigmatism was reduced significantly by pterygium surgery and the results were stable for at least eight weeks following the surgical excision.

THE EPZDEMOLOGY OF PROXIMAL FEMORAL FRACTURES

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Abstract

Fractures of the proximal femur are the source of confusion. They constitute a major health problem. This epidemiological analysis was performed to evaluate the actual problem in our population. Fractures of proximal femur managed at Mansoura University Emergency Hospital (August 2000 till the end of July 2001) were studied in term of fracture morphology, age, sex and mechanism of injury. Most of the fractures occur in the elderly. Simple fall was the common cause of injury. Trochanteric fractures were the common type. There were no fractures of head of the femur during this study.

**NEURORADIOLOGICAL AND
ELECTROENCEPHALOGRAPHIC
ABNORMALITIES IN PHENYLKETONURIC
CHILDREN : CLINICAL AND BIOCHEMICAL
CORRELATIONS**

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Abstract

Phenylketonuria (PKU) is an inborn error of protein, metabolism that results from an impaired ability to metabolize the essential amino acid phenylalanine that causes disturbed mentality and significant morbidity in infants and children with (PKU) . The present work was conducted to study the correlation between clinical features, phenylalanine (PHE) serum level, electroencephalographic (EEG) changes and brain magnetic resonance imaging (MRI) in children with PKU. Twenty-six patients were included in this study, 16 males and 10 females whose age ranged from 2.5 years to 16 years. Consanguinity (80.76%) and similar conditions in the family (65.38%) are commonly present in patients. All patients (100%) were presented with skin and hair hypo-pigmentation to a variable extent, while blue eyes were found in 7.41% of cases . Developmental delay was found in 100% of cases, while mental retardation (MR) was found in 96.15% of cases, hyperactivity disorders and epilepsy were present in 42.31% and 15.38% of cases respectively. Neurological evaluation revealed that 23.08% of cases were presented with quadriparesis and 3.84% with paraparesis. According to IQ , 3.85% had normal mentality, 30.77% had mild MR and 65.38% had moderate MR. A positive correla-

tion between the degree of mental retardation and the serum PHE level was found. Abnormal brain MRI findings were present in 73.08% of cases in the form of periventricular demyelination, but insignificant relation was found between brain MRI findings and serum PHE level. Abnormal EEG findings were present in 42.31% of cases in the form of generalized epileptic discharges. There was no relation between the EEG findings and the serum PHE level or the clinical manifestations. We conclude that early diagnosis of PKU and genetic counseling are of protective value and brain MRI is a helpful tool in assessing the efficacy of dietary treatment and patient compliance.

A METAL PROSTHESIS FOR RADIAL HEAD FRACTURES

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Abstract

Background: It is important to restore the radiocapitellar contact through repair or replacement of the radial head fracture as it takes 40% offerees transmitted through the elbow. Purpose: To develop an immediate stability of the radiocapitellar Joint and to avoid many complications produced by other techniques such as excision, internals fixation or silicon rubber radial head prosthesis.

Patients and Methods: Fifteen patients average age 35 years had radial head fractures of different types were subjected to radial head replacement with metal prosthesis immediately and late with an average follow-up of 30 months.

Results: All prostheses have performed well with an improved Mayo Elbow Performance Score (MEPS), 50% excellent, 30% good, 13% fair and 7% poor.

Conclusion: Metal radial head prosthesis is recommended for use as a spacer to stabilize the elbow after radial head injuries with satisfactory success and minimal complications.

THE USE OF INTERSPINAL DISTRACTION IN DECOMPRESSION OF LUMBAR STENOSIS

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Abstract

Background: In routine laminectomy for lumbar spine decompression a relatively maximal bone is removed that may result in lumbar instability.

Purpose: To develop a safe technique using the interspinal spreader (distractor) for preservation of bone and protection of neural structures.

Patients and Methods: Sixteen patients had foraminal stenosis due to different causes of stenosis were subjected to lumbar decompression with the use of interspinal distractor (spreader) after failure of conservative treatment.

Results: The results were assessed intraoperatively on basis of the safety of the technique, the neural passage visualization, and the amount of bone resection. Postoperative assessments of results were graded according to both Getty clinical evaluation and to radiologic criteria of decompression. Pain was relieved in 62%, partially relieved in 25% and no relief in 13%.

Conclusion: We conclude that the use of interspinal distractor (spreader) in decompression of lumbar stenosis is a reliable method with minimal morbidity as regard lumbar instability and neural structures injuries.

CLINICAL RELEVANCE OF SOME MARKERS OF DISEASE ACTIVITY OF SYSTEMIC LUPUS ERYTHEMATOSUS

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Abstract

Systemic lupus erythematosus (SLE) is a multisystem autoimmune disease characterized by episodic change of disease activity with marked tendency to exacerbation and remission. Assessment of SLE disease activity requires clinical assessment supplemented by laboratory testing.

Many techniques for grading disease activity have been used to validate or evaluate the clinical significance of immunochemical tests.

The aim of this study was to assess serum Ferritin and vascular endothelial growth factor (VEGF) in relation to clinical and other Laboratory markers of disease activity in SLE.

This study included 26 patients fulfilling the criteria of American college of Rheumatology (ACR) for diagnosis of SLE and 10 healthy control.

Patients were clinically assessed according to systemic lupus erythematosus disease activity index (SLEDAI) and laboratory assessment including: urine analysis, s. creatinine, blood picture, ESR, C3, C4, ANA, Anti-DNA, s. ferritin, and VEGF. Patients were categorized into 2 groups (according to s. creatinine).

There was significant increase in serum ferritin and VEGF in the studied group versus control ($P < 0.001$). There were significant positive correlation between SLEDAI and ESR, serum ferritin and VEGF ($r = 0.71$, 0.81 $p < 0.001$, $r = 0.14$ $p < 0.001$, $r = 0.79$ $p < 0.001$ respectively) while negative correlation with platelet count ($r = -0.44$ $p < 0.05$). Serum ferritin showed significant correlation with vasculitis and ESR ($r = 0.56$, $P < 0.002$, $r = 0.55$, 0.57 , $p < 0.001$) with negative correlation between serum ferritin and C3 and C4 ($r = -0.62$, -0.54 , $P < 0.001$). VEGF showed a significant positive

correlation with ESR, ANA, and Anti-ds DNA ($r = 0.42$, 0.45 $P < 0.001$, $r = 0.31$ $P < 0.05$ and $r = 0.29$ $P < 0.05$ respectively) while negative correlation with haemoglobin concentration, platelet count, C3 and C4 ($r = -0.31$ $P < 0.05$, $r = -0.25$ $P < 0.05$, $r = -0.27$ $p < 0.05$, $r = -0.26$ $p < 0.05$ respectively). SLE patients with abnormal serum creatinine had significantly increased plasma VEGF levels compared with SLE patients with normal renal function ($p < 0.001$). In conclusion, this study highlighted a possible value of serum ferritin and VEGF levels as useful markers of disease activity in SLE.

**THE EFFECT OF INSULIN RESISTANCE ON
SOME HAEMATOLOGICAL PARAMETERS :
A NEW ASPECT OF METABOLIC
SYNDROME**

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Abstract

Background and Objective: A strong association between insulin resistance syndrome (IRS) and cardiovascular diseases mainly coronary heart disease has been demonstrated. Hyperinsulinaemia is an independent risk factor for cardiovascular diseases probably due to the capacity of insulin to directly promote the growth of vascular cells and atherosclerosis. Previous studies have shown that insulin has an important in vitro role in the regulation of human erythropoiesis. We investigated whether in vivo hyperinsulinaemia / insulin resistance affects haematological parameters.

Methods: We studied 50 obese subjects with insulin resistance syndrome with their age ranging from 22-44 years and 20 healthy subjects as a control with age ranging from 26-45 years. All were subjected to thorough clinical assessment, anthropometric measurements including body weight (Kg), height (m), body mass index (BMI) Kg/m², waist circumference (cm), hip circumference (cm), waist/hip ratio laboratory investigations as fasting blood glucose, insulin, lipogram, PAI-1, fibrinogen and complete blood picture. The degree of insulin resistance was assessed using the homeostasis model assessment (HOMA).

Results: Our study revealed: significant elevation of red blood cell count, hemoglobin level, haematocrit, plasminogen activator inhibitor-1 and fibrinogen level in patients with insulin resistance syndrome with positive correlation between the above haematological parameters and in-

ulin resistance. Also there was positive correlation, between the haematological parameters and other components of the insulin resistance syndrome e.g. body mass index, total cholesterol. Triglycerides, Low density lipoprotein cholesterol and negative correlation with high density lipoprotein cholesterol.

Conclusion: Our findings provide in vivo evidence of a relation between hyperinsulinaemia I insulin resistance, the main variables of insulin resistance syndrome and erythropoiesis. Increased Red blood cell count could be considered as a new aspect of the insulin resistance syndrome that could contribute to the increased risk of developing cardiovascular problems.

**THE EFFECT OF PREOPERATIVE
ADMINISTRATION OF COX II INHIBITOR
ON POSTOPERATIVE EFFORT DEPENDENT
PAIN, MEPERIDINE REQUIREMENTS,
INTRAOPERATIVE BLOOD LOSS
AND BLEEDING TIME**

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Abstract

COX II inhibitors reduce pain and inflammation without inhibiting platelet junction, we examined Meloxicam effect on pain and effort dependent pain, postoperative meperidine requirements, pulmonary junction (FEV1 and FVC) , need for anti-emetics and intraoperative blood loss. Pre-operatiue base line of FEV1 and FVC were assessed 2 hours before surgery, meloxicam 15 mg was injected half an hour before surgery in half of the patients scheduled for open cholecystectomy surgery , then anesthesia was induced using the same regimen in both groups . Intraoperatiuemepерidine was limited to 1 mg/kg . Postoperative pain was treated with intravenous meperidine in PACU and later on using iv. boluses of 10 mg increments to achieve patient comfort.

Meperidine dose, pain intensity at rest and after respiratory effort (postoperative spirometry) were assessed at 12 and 24 hours after the study drug administration. There was a statistically significant reduction in meperidine requirements in group A (receiving meloxicam 15mg) in PACU and in the first 12 hours postoperatively. Both FVC and FEV1 were decreased from base line records however, they were best preserved in group A at 12 hours. At 24 hours , there was no statistical difference between both groups as regard FVC and FEV1. No statistical difference was found between both groups as regard the incidence of postoperative nausea and vomiting, bleeding time and change in haematocrite value. There was a statistically significant improvement in pain score in PACU and up to 12 hour postoperatively in group A .

A COMPARISON OF ORAL AND VAGINAL PROSTAGLANDIN E1 (MISOPROSTOL) FOR CERVICAL RIPENING AND LABOR INDUCTION

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Abstract

One hundred and twenty women chosen for induction of labor were selected to evaluate the safety and efficacy of oral and intravaginal misoprostol for cervical ripening and induction of labor. Women were randomly assigned to receive either oral misoprostol (Group I = 60 cases) or intravaginal misoprostol (Group II = 60 cases). The groups were compared regarding the progress of labor (induction-delivery interval, incidence of tachysystole, oxytocin augmentation and mode of delivery). The fetal condition was assessed by fetal heart rate (FHR) monitoring and Doppler waveform changes from the umbilical and middle cerebral arteries (IUA and MCA). Neonatal outcome including birth weight, 1 and 5 minutes Apgar's score, UA blood gases and Neonatal Intensive Care Unit admission (NICU) were evaluated.

It was found that the induction delivery interval was shorter in group II than that in group I (878±384 vs 901±448 minutes) ($P > 0.05$). Oxytocin augmentation of labor occurred more in group I (66.6%) than in group II (40%) ($P < 0.05$). There was a higher incidence of tachysystole and meconium stained liquor in group II than group I (36.6% vs 13.3% and 23.3% vs 10%, respectively). Also, the incidence of UA-pH (< 7.10) was significantly higher in group II than that in group I (10 vs 3.33%) ($P < 0.05$). There was no significant difference between both groups regarding to mode of delivery, frequency of abnormal fetal heart rate tracings, 1- or 5 minutes Apgar's score < 7 , neonatal resuscitation or NICU admission ($P > 0.05$). Regarding the fetal haemodynamic changes, it

was found that in group-I the waveform indices (S/D ratio and PI) were significantly decreased in MCA ($P < 0.05$) but in the UA the S/D ratio was significantly decreased ($P < 0.05$), while PI was not significantly decreased ($P > 0.05$). In group-II, all the waveform indices (S/D ratio and PI) were not significantly decreased in the UA and MCA ($P > 0.05$).

From this study, it was concluded that the oral misoprostol is a nice option for cervical ripening and induction of labor. It appears to be safer than intravaginal misoprostol. Further large studies to determine optimal dose and regimen of administration are essential.

**EFFECT OF GAMMA RADIATION ON THE
PROXIMAL CONVOLUTED TUBULES OF THE
RAT KIDNEY AND THE PROTECTIVE
EFFECT OF MELATONIN**

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Abstract

The ionizing radiation can have serious . adverse effects on people and this was depending on ; radiation quality , dosage and environmental factors. There is controversy on the health effects of low dose radiation. The objective of the present study is to spot light on the radioprotective effect of melatonin in rate exposed to low dose radiation.

Thirty adult male albino rats were used in this study , they were divided into three equal groups. The first group was served as a control group. The second group was given a fractionated dose of gamma radiation at a dose level 1/2 Gy twice a week for eight weeks. The third group was given a daily intraperitoneal injection of melatonin at a dose 10 mg / kg and irradiated by 1/2 Gy twice a week for eight weeks. All experimental animals were sacrificed after 8 weeks. Their kidneys were removed and were prepared for light and electron microscopic studies. The proximal tubules of the irradiated group were greatly affected by radiation. These injuries were in the form of intertubular degeneration, hemorrhage and disturbance of their cytoplasmic organdies. The protection induced by the pretreatment with melatonin was marked: where the proximal tubules nearly retain their normality.

PROTECTION AGAINST AGING OF LIVER IN OVERIECTOMIZED FEMALE RATS

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Abstract

One of the most considered complications of aging is liver affection because liver plays a decisive role in many biological processes in the body. Disturbance in hormonal balance following aging may affect liver junctions specially in females. So, the present study is aimed to monitor the modulatory effects following aging on the integrity and efficiency of liver cell and the mechanistic pathway for liver dysfunctions. The parameters investigated are the integrity of liver cells (HX & ampE), the level of metallothionine (As an antioxidant), cytochrome P450 2E1 enzyme (As an oxidizing enzyme) using immunohistochemical staining in addition to biochemical determination of Glutathione, lipid Peroxides in normal, overiectomized and protected overiectomized (zinc received] female rats, in addition to γ -glutamyl transferase enzyme as an indicator for liver function (GGT). The resulted data indicates that, overiectomy led to increased extent of liver cell damage, intensified staining to both metallothionine and cytochrome P450 2E1, decreased glutathione and GGT enzyme and increased lipid peroxides in the form of malondialdehyde (MDA). However, administration of zinc (I.P.) prior to overiectomy resulted in decreasing of damaging effect, increasing in metallothionin decreasing cytochrome staining, increased glutathione level in addition to decreased MDA and GGT levels.

From above; it could be concluded that, aging lead to liver damage and dysfunction an effect which may be avoided via prior administration of zinc as an antioxidant.

**EFFICACY AND SAFETY OF INTRAVENOUS
PARECOXIB SODIUM VERSUS KETOROLAC IN
RELIEVING ACUTE POSTOPERATIVE PAIN
FOLLOWING OPEN PROSTATECTOMY**

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Abstract

This study was designed to determine the analgesic efficacy and tolerability of parecoxib, cyclooxygenase-2 inhibitor, by comparing it with ketorolac and placebo in postoperative pain control after open prostatectomy.

Sixty patients undergoing open prostatectomy were evaluated. The patients were divided into three equal groups. Group I received IV parecoxib 40mg, group II received IV ketorolac 30mg, and group III received IV placebo postoperatively every 6 hours for 24 hours. Postoperatively, all patients received intravenous morphine using patient controlled analgesia pump (PCA). The outcome measures included pain scores and morphine consumption in the first 24 hours postoperatively. Bleeding time was determined immediately postoperatively and after 24 hours of the study drug administration.

Parecoxib sodium 40mg reduced the total amount of morphine required over 24-hours by 36% also ketorolac 30mg reduced morphine consumption by 33.5%, compared with placebo ($P < 0.001$). Patients who received 40mg parecoxib sodium or 30mg ketorolac experienced significantly greater maximum pain relief compared with those in the placebo group ($P < 0.05$). Patients who received 40mg parecoxib or 30 mg ketorolac discontinued PCA with morphine earlier than patients received placebo and had significantly higher global evaluation ratings. Significant prolongation of bleeding time was observed in ketorolac group after 24 hours of its use

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(290 seconds vs. a baseline of 218 seconds). Parecoxib and placebo groups demonstrated no significant changes in bleeding time.

EFFECT OF VITAMIN E ADMINISTRATION ON ARTIFICIALLY INDUCED DIABETES IN RATS

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Abstract

It has been generally accepted that most of clinical disorders are due to the presence of vast numbers of free oxygen radicals (oxygen species). Nowadays, vitamin E is considered to control disease incidence. The present investigation was conducted on artificially induced diabetes in albino rats to probe the curative and the prophylactic effects of vitamin E . 90 adult albino rats of both sexes (60 females and 30 males) were utilized. The animals were divided into 4 major groups. The first group (G1) served as control, the second group (GII) received a single dose of 40 mg / kg body weight streptozotocin (diabetogenic) I. P. one week before mating, animals of the third group (GIII) received 400mg /Day S.C. of vitamin E 2 weeks before induction of diabetes and the fourth group (GIV) received the drug one week before mating and vitamin E one week after pregnancy till the day of delivery. The offspring of each group were examined for diabetes after 2 (a) and 4 (b) weeks. For each group, biochemical, histological, and quantitative study were done. The results showed that the offspring of positive control diabetic mothers had hypoglycaemia at the age of 2 weeks and hyperglycaemia at the age of 4 weeks. In 4 weeks offspring .of all experimental groups hyperglycaemia was statistically significant. The blood glucose level was directly proportional to the histological and quantitative changes concerning beta cells of the pancreas which showed degenerative changes in the form of pyknosis, karyorrhexis, ballooning and lastly complete cell loss. The discussion of the results provides an evidence that hyperglycaemic environment surrounding the embryos might affect cell mass, and administration of vitamin E before induction of diabetes did improve the state of hyperglycaemia (Prophylac-

TOPICAL MITOMYCIN C IN VERNAL KERATOCONJUNCTIVITIS

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Abstract

Purpose : The purpose of this study was to clarify the clinical effects and safety of low dose topical mitomycin C in patients with vernal keratoconjunctivitis (VKC).

Methods : Twenty patients (40 eyes) with active VKC were treated with low dose topical mitomycin C 0.01% three times daily/or 2 weeks. Symptoms and signs were graded according to severity on a scale of 0 to +3. Patients were followed up for 4 weeks after treatment.

Results : At the end of the 2-week treatment period patients with low dose topical mitomycin C have shown statistically significant improvement as regards symptoms and signs. No adverse effects of treatment with mitomycin C were observed.

Conclusion : Low dose topical mitomycin C may be considered safe and effective for the short-term treatment of severe, recalcitrant VKC.

CORRELATION BETWEEN ELEVATED VAGINAL PH AND NEUTROPHILS WITH EARLY SPONTANEOUS PRETERM BIRTH

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Abstract

Objective: To determine the association of vaginal pH > 5.0 and neutrophils ≥ 5 per oil-field with early preterm birth.

Study design: Prospective cohort clinical study.

Population and methods: In 500 women with normal singleton pregnancies at 23-27 weeks of gestation vaginal swabs were obtained for pH and Gram stain for diagnosis of neutrophils.

Main outcome measures: Occurrence of spontaneous preterm labour at <32 and <37 weeks of gestation.

Results: Vaginal pH ≥ 5 was found in 93 women (18.6%), vaginal neutrophils >5 /HPF in 210 women (42%), and concomitant presence of both markers in 39 women (7.8%). At all gestational ages, vaginal neutrophils >5 , pH ≥ 5.0 were significantly associated with preterm labour ($P < 0.05$) and the point estimate of the strength of that association increased as gestational age at delivery decreased.

Conclusion: Elevated vaginal neutrophil (>5 /HFP) or vaginal pH (>5.0) or both together were associated most strongly with the earliest preterm birth.