

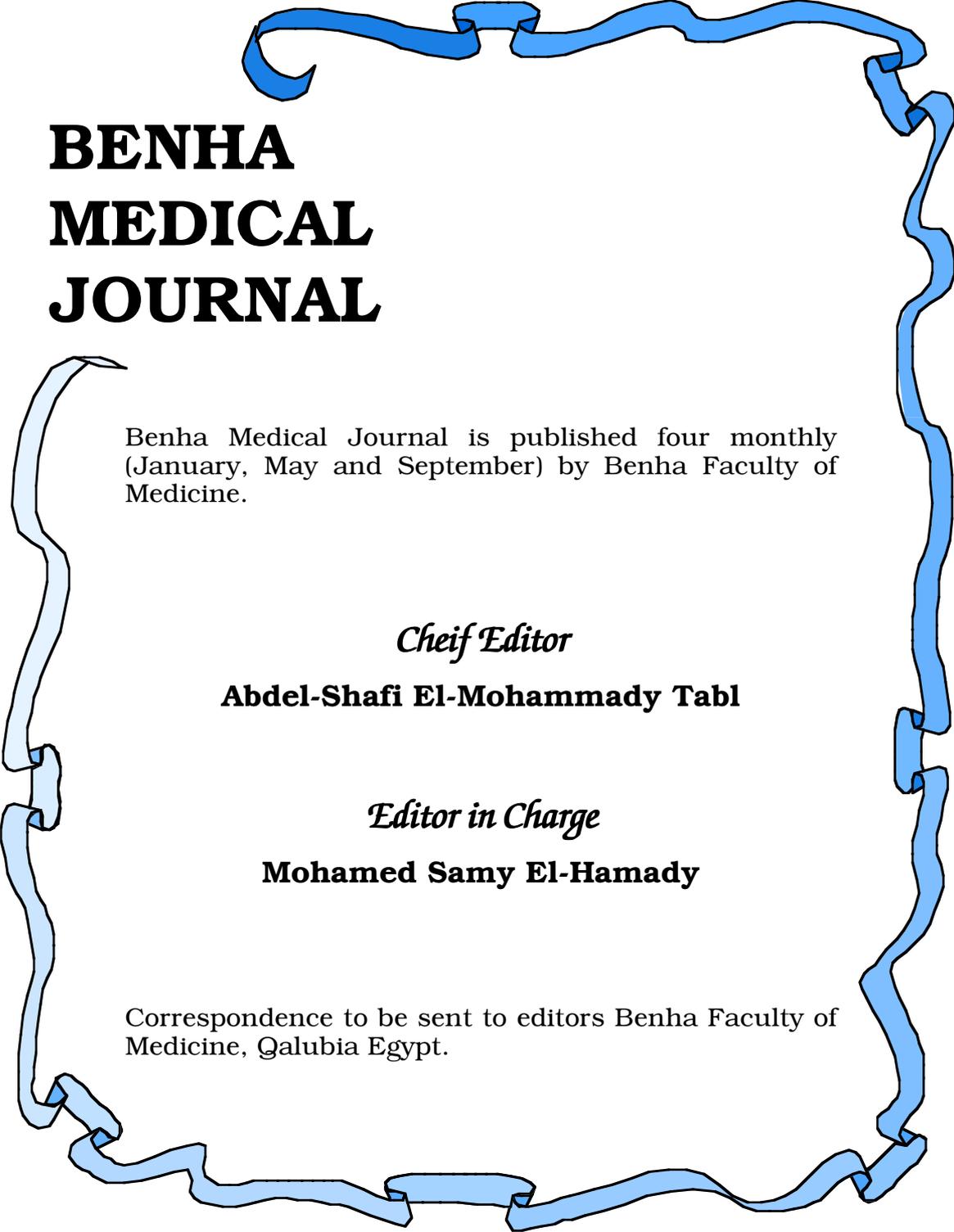
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CORONARY ARTERY BYPASS GRAFT IN ELDERLY PATIENTS WITH AND WITHOUT CARDIOPULMONARY BYPASS: EARLY AND MID-TERM CLINICAL OUTCOMES

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Abstract

Objective: To assess the influence of off-pump coronary artery surgery on early and midterm clinical results in elderly patients. Background: Coronary artery bypass grafting (CABG) in elderly patients is associated with perioperative mortality and morbidity rates higher than those observed in young aged patients. The avoidance of cardiopulmonary bypass (CPB) in this population is potentially beneficial. Methods: This a retrospective study consisted of 1007 CABG patients. Of these 583 patients underwent CABG without CPB (group A) and 424 patients underwent CABG with CPB (group B). Patients that converted from off-pump to CPB were included in group A. Results: Most of the preoperative variables were comparable between the two groups. Group A patients had more preoperative cerebrovascular accident ($p=0.044$), carotid artery disease ($p=0.025$) and renal impairment ($p=0.03$). Group B had more female patients ($p=0.045$), more patients with low EF ($p=0.007$) and more patients with multivessel disease ($P=0.031$). 33(5.7%) patients were converted to CPB. Early mortality was 3.7% (group A, 2.6%, Group B, 5.2%; $p=0.045$), acute myocardial infarction incidence was 2.38% (group A, 1.5%; group B, 3.5%; $p=0.041$), cerebrovascular accident incidence was 0.99% (group A, 0.34%; group B, 1.88%; $p=0.034$), and early major events incidence was 9.9% (group A, 7.9%; group B, 13.2%; $p=0.006$). Group A had a short ICU and hospital stay than group B. Stepwise logistic regression analysis

showed that CPB was an independent risk factor for higher mortality (Odds Ratio "OR", 2.2; $p=0.0217$), higher incidence of acute myocardial infarction (Odds Ratio, 2.5; $p=0.0185$), and higher incidence of early major events (Odds Ratio, 1.8, $p=0.0034$). Mid-term mortality or cardiac-related events were similar in the two groups.

Conclusion: In elderly patients, off-pump CABG is safe-procedure that facilitates early recovery and reduces the incidence of postoperative mortality and morbidity. At mid-term follow up, the incidence of mortality and cardiac-related events were low in both group supporting a more aggressive policy of coronary revascularization in elderly patients.

CHOANAL ADENOIDS IN ADULTS : DIAGNOSIS AND TREATMENT

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Abstract

Choanal adenoids, a rather rarely defined phenomenon, is the presence of adenoid tissues in the choanae, without being extension of the commonly well-known nasopharyngeal adenoids. We present a series of 22 adult patients (17-38 years; 15 males, 7 females), with persistent bilateral nasal obstruction and recurrent nasal infections, and with history of repeated unsuccessful medical and, in many cases, repeated surgical procedures, in whom choanal adenoids was diagnosed by nasal endoscopy and/or CT scanning. Absence of adenoid tissues in the nasopharynx was confirmed in all cases. Surgical removal of choanal adenoids was undertaken in all cases endoscopically. Some other surgical procedures like straightening of a deviated septum or reduction of a hypertrophied turbinate were undertaken in some indicated cases. Most of cases experienced complete relief of obstruction and return of a patent nasal airway and improvement of associated complaints as dry mouth and persistent-cough. A thorough review of this phenomenon and its clinical relevance and methods of diagnosis and management are presented. We recommend a thorough nasal endoscopy as a routine in cases of persistent nasal obstruction even in the presence of an apparent cause of obstruction.

Key words: choanal adenoids, adenoidectomy, endoscopic surgery

A STUDY OF DIABETIC AND NON-DIABETIC NEUROPATHIES IN DIABETIC PATIENTS : THE MAGNITUDE OF THE PROBLEM

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Abstract

The epidemiology of diabetic and non-diabetic neuropathies in diabetic patients is important for agreement over its diagnostic criteria. The present study aimed to put the diagnostic criteria for both neuropathies in diabetic patients. This study comprised 60 diabetic patients with symptomatic neuropathy (40 males and 20 females) with age ranged from 21 to 82 years. They were subdivided into 2 subgroups, according to type of their diabetes, group 1 (45 patients with II DM) group 2 (15 patients with type I DM).

They were evaluated in order to know more about the causes of neuropathy in this population and the signs and symptoms that could suggest other causes than diabetes in this sitting.

Diabetes accounted for (75%) of the neuropathies in the whole group of patients while Twenty-five percent (25%) of patients have a neuropathy unrelated to diabetes.

Chronic inflammatory demyelinating neuropathy that was diagnosed in 10% is the most common non-diabetic cause of neuropathy within population.

A short interval between diagnosis of diabetes and the onset of the neuropathy, early motor deficit, markedly asymmetrical deficit and generalized areflexia, which are all uncommon in the diabetic neuropathy, in favor of a non-diabetic origin of the neuropathy and should lead to further investigations.

**THE DIAGNOSIS AND PREVALENCE OF
SUBCLINICAL HEPATIC ENCEPHALOPATHY
IN APPARENTLY HEALTHY CHILDREN AND
ADOLESCENTS WITH CIRRHOSIS**

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Abstract

Subclinical or minimal hepatic encephalopathy (SHE or mHE), in contrast to hepatic encephalopathy is not associated with overt neuropsychiatric symptoms but rather with subtle changes detected by special psychomotor and / or neurophysiologic tests. The purpose of this study was to elucidate the validity of the neuropsychological and newophysiological methods to diagnose SHE in children and adolescents with liver cirrhosis.

Furthermore, to detect its prevalence in a specific period. A prospective controlled study was applied on 23 patients (10 males and 13 females with mean age 10.24±3.87 years) with different etiologies of liver cirrhosis, through the period from August 2002 to August 2003. Fifteen healthy children and adolescents with matched age, sex and education standard, were included as a control group. All patients and controls were subjected to: thorough clinical evaluation, laboratory tests of liver functions, neuropsychological assessment using the Egyptian version of Wechsler intelligence tests, visual and mapping analysis of electroencephalographic records and event related potential (P300) testing.

Results revealed: Patients and controls were age and sex matched and showed no significant difference in periods of education. Serum bilirubin and prothrombin time were significantly affected in patients compared with controls. Verbal, performance and full scale IQ were all significantly affected in patients compared with controls; a cut off point of ab-

normal test performance was seated at scaled score 2 SD below the mean of the controls. Patients have significant slowing in EEG background activity compared to controls ($P=0.001$); a cut off point for diagnosis of slow activity was seated at 6.8 C/S. Prevalence of SHE among cirrhotic patients was 47.8% by applying two abnormal neuropsychologic tests and 65.2% by applying two abnormal psychologic tests together with significant slowing of EEG background activity. Prevalence of SHE among patients with Child-Pugh class B/C cirrhosis was significantly higher than that recorded in patients with class A cirrhosis ($P<0.05$). Event related potentials (P300) mean wave latency and mean wave amplitude showed no significant differences between patients and controls, however, cirrhotic patients with SHE had significant prolongation of mean P300 wave latency than patients without SHE ($P=0.031$). Clinical follow up (5 ± 1.64 months) revealed that two out of fifteen mHE diagnosed patients died after 3 and 5 months from initial testing and the two were Child-Pugh class C and overt encephalopathy was precipitated by sepsis.

Conclusion: Minimal hepatic encephalopathy is quite prevalent in our patients (65.2%) and the diagnosis can be ascertained by special neuropsychological and/or neurophysiological tests. Minimal hepatic encephalopathy is thought to predict the development of overt hepatic encephalopathy, thus it is clinically relevant.

SERUM ANGIOGENIN LEVEL IN CONGENITAL HEART DISEASES

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Abstract

Background: Abnormal angiogenesis is reported, in patients with congenital heart diseases (CHD). Angiogenic growth factors play an important role in the regulation of angiogenesis. This study was done to assess serum angiogenin (ANG) levels in children with CHD, its correlation with degree of hypoxaemia and its relation to the development of pulmonary hypertension (PH).

Subjects and methods: Serum ANG level was assessed by sandwich enzyme immunoassay technique in 36 children with cyanotic congenital heart diseases (CCHD) and in 35 children with acyanotic congenital heart diseases (ACHD). Both groups were compared to 12 healthy controls of matched age and sex.

Results: CCHD patients had higher serum ANG levels compared to both ACHD [177.8 ± 53.7 Vs 149.4 ± 51.2 ng/ml, P = 0.02] and controls [177.8 ± 53.7 Vs 114.8 ± 51.8 ng/ml. P = 0.002]. ANG was negatively correlated with pO₂ and O₂ saturation (r = -0.46. p = 0.004 and r = -0.403, p = 0.015; respectively). ANG level in ACHD was not significantly different from controls [149.4 ± 51.2 Vs 114.8 ± 51.8 ng/ml. P = 0.06]. In ACHD, patients with PH had significantly elevated ANG levels when compared to those without PH [188.9 ± 48.7 Vs 137.7 ± 46.6 ng/ml, P = 0.01] and to controls [188.9 ± 48.7 Vs 114.8 ± 51.8 ng/ml, P = 0.005].

Conclusions: Increased ANG in CCHD -secondary to hypoxemia- may be responsible for abnormal angiogenesis in these patients. Increased ANG levels in ACHD patients with PH may be a compensatory mecha-

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rusm aiming /or neouasculrization distal to the site of pulmonary vascular obstruction.

Key words: Angiogenin - congenital heart disease - pulmonary hyperma tension - children.

**EXTERNAL DACRYOCYSTORHINOSTOMY
VERSUS ENDOSCOPIC NON-LASER
DACRYOCYCSTORHINOSTOMY
"A COMPARATIVE STUDY"**

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Abstract

A retrospective study to compare outcomes after external dacryocystorhinostomy (Ex-DCR) and transnasal endoscopic assisted nonlaser dacryocystorhinostomy (End-OCR). A total of 214 Ex-DCR performed to 208 patients operated from the 1996 to 2002 and a total 118 End-DCR of patients were reviewed. The follow up period -was at least one year. Three techniques were performed in each group. Patency of the drainage system was assessed by history and irrigation. A fuU success was achieved in 86% of Ex-DCR group and 77.1% among End-DCR group by different techniques. The operating time, difficulties, postoperative recovery time and complications were compared. The Ex-DCR has a higher success rate compared to the End-DCR. However, End-DCR has a shorter operative time, no external scar es. and more suitable for recurrent cases.

INDEPENDENT VALUE OF DNA PLOIDY AS A PROGNOSTIC INDICATOR IN PATIENTS WITH NONMETASTATIC RENAL CELL CARCINOMA

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Abstract

Introduction: Several studies performed on tumours from different organs have shown that DNA ploidy is an additional predictor for survival. However the significance of DNA ploidy as an independent prognostic factor for patients with renal cell carcinoma (RCC) is less clear. Therefore the purpose of this study is to assess if DNA flow cytometry data in RCC adds valuable prognostic information.

Methods: One hundred sixty-eight consecutive patients were selected from 226 patients with RCC who underwent nephrectomy at our institution between 1983 and 1995. All patients were free of metastatic or locally irresectable disease preoperatively. DNA content was analysed by flow cytometry. DNA ploidy of the tumour tissue was compared with tumour size, pathologic stage (TNM 1997), grade, histological subtypes and disease related survival rates. Different prognostic factors were studied using both univariate and multivariate analyses.

Results: Of the 168 tumours analysed, 92 (54.8%) displayed diploid DNA and 76 (45.2%) had aneuploid pattern. Statistical correlations were seen between DNA ploidy pattern and each of tumour size, stage and grade. Significant high incidence of tumour recurrence was observed among patients with aneuploid tumours (46%) when compared with that of diploid population (17.4%) [$P < 0.001$]. According to univariate analysis, tumour size, stage, grade and DNA ploidy had significant impact on pa-

tients outcome. On multivariate analysis, DNA ploidy in addition to tumour stage and grade were significant independent prognostic factors.

Conclusion: DNA ploidy is a reliable prognostic factor for RCC and yields considerable information for patient management and predicting clinical outcome.

**AN ASSAY FOR PHOSPHOINOSITIDE-SPECIFIC
PHOSPHOLIPASE C AND THE EFFECT
OF PYRIDOXAL-5-PHOSPHATE
ON THE ASSAY**

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Abstract

In platelets, the major stimulatory second messengers are inositol 1,4,5 triphosphate (IP₃) and 1,2-diacylglycerol (DAG) produced upon the hydrolysis of phosphoinositides by phosphoinositide-specific phospholipase C (PI-PLC). Pyridoxal-5-phosphate (PLP) is well known as a potent inhibitor of platelet aggregation. The mechanism(s) of its inhibitory action remains to be elucidated. PI-PLC was assayed and the effect of PLP on the assay was examined in an attempt to explain the nature of the inhibitory effect of PLP on platelet function. The assay was satisfactory and was inhibited by PLP with full inhibition at 10⁻⁶M PLP.

VALVULAR VERSUS MYOCARDIAL DYSFUNCTION IN CHILDREN WITH RHEUMATIC FEVER

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Abstract

Objectives: To study the myocardial factor in patients with the initial attack of acute rheumatic fever (ARF).

Subjects and Methods: Twenty-eight patients with initial attack of ARF; 8 without carditis (group 1) and 20 with carditis (group 2) were studied in the acute inflammatory stage of the disease and after subsidence of rheumatic activity. Control group included 8 healthy children. Serum levels of cardiac troponin-I (cTnI), creatine kinase-MB (CK-MB) as well as M-mode, Two-dimensional echocardiography and color Doppler examinations were performed in all patients and controls.

Results: Serum cTnI and CK-MB levels were not significantly different in groups 1 and 2 compared with controls ($P > 0.05$) and in group 1 compared with group 2 ($p > 0.05$). Moreover, no change in cTnI, CK-MB or M-mode echocardiographic findings was found after subsidence of rheumatic activity ($p > 0.05$). No correlation was found between serum cTnI, CK-MB and the severity of carditis as determined by chamber enlargement and severity of valvular regurgitation by echocardiography ($P > 0.05$). Left ventricular fractional shortening, as an indicator of left ventricular systolic function was normal in patients enrolled in the study and did not differ between patient groups.

Conclusions: No laboratory evidence of myocardial cell injury was demonstrated in patients with ARF. Moreover, echocardiographic evidence of decreased systolic function of the left ventricle was lacking even in the presence of severe valvular regurgitation. This supports the current view that acute valvular regurgitation, rather than myocardial involvement, is the major hemodynamic abnormality in these patients.

THE USE OF BIOGLASS IN CLOSURE OF RECURRENT OROANTRAL FISTULA

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Abstract

Oroantral fistula is a commonly encountered clinical problem. As the diameter of the bony deficiency and elevated air pressure on one or both sides of the wound are main factors involved in healing of OAF it was tried in this study to investigate the effects of the use of Bioglass for the treatment of recurrent oroantral fistula after surgical closure. The study was conducted on 14 patients having a history suggesting oroantral fistula after tooth extraction with recurrence after previous surgical closure.

A coronal CT scan was performed to assess the maxillary sinus and to evaluate the fistula. The Caldwell-Luc operation was performed endoscopically for the existing sinus pathology. After the treatment of sinus pathology, a palatal, buccal or buccopalatal flap was created. Scar tissue and osteitis were removed from the fistulous tract. The track was then closed using a piece of Bioglass plate. The piece of the used bioglass was sculptured using a sharp scalpel or a diamond burr until it becomes nearly fitted to the track then it was placed inside the track. If there is any space between the piece of the Bioglass and the outer wall of the track. The mucoperiosteal palatal flap is rotated across over the defect.

After 3 months the fistula closed by new bone of nearly the same density of the adjacent bone in 12 patients. Postoperative radiographs showed clear sinuses in 12 patients with mildly thickened mucosa at the floor and adjacent parts of the medial and lateral walls. In 2 patients the operation was considered as failed. One of those two patients was diabetic. In the diabetic patient, there was extrusion of the bioglass after 7 days from the wound which healed partially. The sinus drained purulent

discharge from the wound. The flaps were edematous and swollen at the site of the fistula. In the other patient there was marked pain at the site of the operation, non healing of the flap above the site of the track.

The bioglass plate was loose and got down easily from the wound. Culture of the purulent discharge of both patients revealed aerobes (Gm positive streptococci and staphylococci.) while in the other diabetic patient. there was mixture of aerobes and anaerobes. In conclusion, the use of bioglass can be helpful in closure of large recurrent oroantral fistula. It acts as a barrier preventing oral and maxillary sinus epithelium to cover the track. It abolishes the elevated pressure in the sinus or oral cavity which may be a factor of failure of healing of soft tissue closure. It is not only beneficial for closure of the fistula by new bone formation but also provides sufficient bone in the alveolar region which may be beneficial for further placement of osseo- integrated implant and conventional prosthetic rehabilitation.

THE DIAGNOSTIC YIELD OF CLINICAL, ELECTROMYOGRAPHIC AND PATHOLOGIC STUDIES IN MUSCLE DISORDERS

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Abstract

Muscle diseases are classified into two major groups, i.e; myopathic which also includes muscle dystrophies and neurogenic. Investigations of muscle disease include clinical biochemistry, electromyography, muscle biopsy and cytogenetics. The aim of our study was to evaluate the diagnostic yield of clinical biochemistry, eletromyographic and pathologic studies in different muscle disorders- further more to detect the prevalence of different muscle disorders in our locality in a specific period. Sixty patients with generlized hypotonia and hyporeflexia (40 males and 20 females) with ages ranged from 2 months to 13 years were studied consequatively, in addition to 15 healthy controls of matched age and sex for comparison in certain aspects. All cases were subjected to: a) thorough clinical and neurological evaluation, b) assessment of serum creatine kinase, c)electromyography and d)muscle biopsy from the most affected muscle for histologic and histochemical studies.

Results revealed: frequency of muscle disorders was pathologically detected as:41.7% in muscle dystrophies, 25% in congenital myopathies, 8.3% in inflammatory myopathies and 25% in spinal muscle atrophy. Clinically; muscle dystrophies were found in 41.7%, however with difference in subtypes. Congenital myopathies were suggested in 30% of cases, inflammatory myopathies in 8.3% and spinal muscle atrophy in 20%. Electromyographic studies were compatible with the pathologic results in all cases of myopathies and spinal muscle atrophy. All cases of muscle dystrophies were evaluated as myopathic disorders. Serum creatine ktnase was highly significantly elevated in the group of muscle dystrophies, significantly elevated in inflammatory myopathies and mildly el-

evated in spinal muscle atrophy as compared with controls.

Conclusion: Clinical biochemistry and pathologic compatibility was found in. 92% of dystrophinopathies group, 88% of myopathies- and 80% of neurogenic muscle atrophy. Apart from the group of muscle dystrophy, the EMG yield was compatible with the pathologic diagnosis of all cases of myopathies, and neurogenic muscle atrophy. Thus all measures are considered concordant in diagnosis of muscle diseases.

THREE MODALITIES OF POSTOPERATIVE PAIN MANAGEMENT FOR TRANSTHORACIC ENDOSCOPIC SYMPATHECTOMY

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Abstract

Transthoracic endoscopic sympathectomy (TES) has been already a standard method for the treatment of primary hyperhidrosis. Postoperative pain is a problem that usually encountered during TES. Although the surgical procedure is simple and short, the pain is usually severe (Failor and Capell, 2003). This study was performed in 57 patients of both sex, aged 11-48 years old, divided randomly into three groups. All patients were premedicated with intravenous midazolam 0.02mg/kg. Anesthesia was induced with sleeping dose of thiopentone sodium, 1ug/kg fentanyl, and atracurium 0.5mg/kg to facilitate endotracheal intubation. We evaluated the effect of three methods of management of postoperative pain. Group I (n=20) was treated by IV pethidine starting with 1mg/kg pethidine with top up doses of pethidine when needed. Group II (n=19) was treated by intrapleural plain bupivacaine 0.25% 1mg/kg. Group III (n=18) was treated by local infiltration of 0.5% plain bupivacaine 2 ml at both sides of cut ends of the sympathetic chain. In conclusion, we found that the systemic use of pethidine was least satisfactory and the intrapleural injection of bupivacaine was the best. However the time to discharge from hospital was the same for all groups.

NM23- HI GENE PROTEIN AS A PROGNOSTIC FACTOR IN LARYNGEAL CARCINOMA

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Abstract

Certain genes may be involved in suppressing metastatic or aggressive tumour behaviour, the non metastatic gene (NM 23H1) is one gene that has been shown to possess metastatic suppressing activity. The expression of NM 23 HI gene protein was investigated in 60 patients with laryngeal lesions . The patients were divided into 2 groups:- Group (1) 40 cases with laryngeal squamous cell carcinoma (21 cases of them with metastatic lymph nodes) and Group (2) 20 cases with laryngeal polyps as control group . The immunoreactivity of NM 23 HI gene protein was assessed according to both pattern and intensity of immunostaining and study the correlation of this immunoreactivity with clinicopathological parameters including grade of differentiation, incidence of lymph node metastasis and the disease recurrence and / or distant metastasis. The immunoreactivity in the metastatic lymph nodes was investigated and compared with their primary tumours. Results of the study showed that most tumours and polyps expressed NM 23 HI gene but high expression was found in (55 %) of laryngeal tumours (22 cases) , while (45 %) of cases (18 cases) showed reduced expression. Ten metastatic lymph nodes showed reduced expression and 1 with high expression from 11 cases of primary laryngeal tumours that had reduced expression, while 5 metastatic lymph nodes showed reduced expression and 5 showed high expression from 10 cases of primary laryngeal tumours that had high expression of NM 23 HI gene product. Gene expression is inversely corre

(ates with grade of differentiation. Primary tumours with high expression showed less distant metastasis whilst those with low expression revealed more aggressive behavior. From these data we concluded that the NM 23 HI gene may play a role in distant metastasis and / or disease recurrence and so could be used as a prognostic factor for metastatic potential in laryngeal carcinoma.

**ALKALINE PHOSPHATASE. TUMOR
NECROSIS FACTOR- α AND MATRIX
METALLOPROTEINASE-8 IN CREVICULAR
FLUID FROM PERI-IMPLANTITIS VERSUS
CHRONIC PERIODONTITIS PATIENTS**

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Abstract

Peri-implantitis is an inflammatory reaction affecting the tissues surrounding osseointegrated dental implants resulting in loss of supporting-bone. Recent advances in the understanding of biologic events involved in the pathogenesis of periodontitis indicating that bone mediators e.g. tumor necrosis factor- α (TNF- α), alkaline phosphatase (ALP) and matrix metalloproteinase-8 (MMP-8) may also be operating in the pathogenesis of peri-implantitis. This study aimed to explore whether pro-inflammatory mediator TNF- α and markers of bone loss; ALP and MMP-8 in periimplant crevicular fluid (PICF) provide a diagnostic information as to the status of the implant. The present study evaluated 11 implants in patients having peri-implantitis and 12 without implantitis as compared to 12 patients with chronic periodontitis. The clinical assessment for all patient groups included pocket depth (PD), plaque index (PI) and gingival index (GI). There were significant differences ($p < 0.05$) in PI, PD and GI in peri-implantitis and periodontitis patient groups as compared to healthy implant group, while there were non significant difference between peri-implantitis and periodontitis patient groups. ALP, MMP-8 and TNF- α were measured in gingival crevicular fluid (GCF) and PICF 2 years postoperatively. The ALP activity and MMP-8 concentration were significantly higher in periodontitis and peri-implantitis patients than healthy implant

group ($p < 0.01$, and $p < 0.05$, respectively). There were no statistically significant differences in TNF- α concentration between the three study groups. There were no statistically significant differences in MMP-8 concentration and ALP activity between periodontitis group and patients with peri-implantitis. The ALP activity showed a significant positive correlation with GI and PD ($p < 0.01$). In conclusion, the present results might suggest that ALP and MMP-8 in PICF has a possible role as a markers of peri-implantitis.

INTRATYMPANIC DEXAMETHASONE IN DIABETIC AND HYPERTENSIVE PATIENTS WITH SUDDEN SENSORINEURAL HEARING LOSS

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Abstract

Systemic steroid therapy has been considered a mainstay for treatment of idiopathic sudden sensorineural hearing loss (ISSNHL), especially among those who suspect a viral etiology. Unfortunately, some patients are poor candidates for systemic steroids. The aim of the present study is to evaluate the efficacy of intratympanic dexamethasone injection for diabetic and hypertensive patients with SSNHL in whom systemic steroid therapy is hazardous. This study was undertaken prospectively on 26 diabetic and hypertensive patients with unilateral moderately severe and severe SSNHL in whom there was a history of a recent upper respiratory tract infection. The patients were 14 men (53.8%) and 12 women (46.2%) with an age range 43-68 years. Under local anesthesia, 0.5 ml of dexamethasone (24 mg/ml) was injected in the tympanic cavity. Injection was performed on three separate occasions over 10 days. Hearing was assessed by pure-tone and speech audiometry immediately before, twice weekly during therapy and within 3 weeks after therapy was discontinued. Pure-tone average (500, 1000 and 2000Hz) improved in 15 patients (57.7%). 7 patients (27%) recovered to normal hearing threshold levels, 5 patients (19.2%) improved to a degree of mild hearing loss and 3 patients (11.5%) improved to a degree of moderate hearing loss. A hearing recovery rate of 57.7% in ISSNHL could be considered a good and encouraging response rate in a group of patients who cannot tolerate systemic steroid therapy and may be considered beyond therapeutic reach.

**PREDICTION OF SMALL-FOR-GESTATIONAL
AGE INFANTS BY QUANTITATIVE ASSESSMENT
OF DIASTOLIC NOTCH IN UTERINE ARTERY
FLOW VELOCITY WAVEFORMS**

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Abstract

To assess the performance and clinical usefulness of the notch depth index (NDI) in predicting small-for-gestational age infants (SGA) in comparison to the previously defined abnormalities in uterine blood flow velocity waveforms; peak systolic over protodiastolic velocities (A/C) ratio, presence of protodiastolic notch and resistance index (RI). This prospective cohort clinical study included evaluation of pulsed Doppler abnormalities of uterine artery velocity waveforms in 673 nulliparae with normal singleton pregnancies at 16-18 weeks and at 26 weeks gestation. Main outcome measures: Delivery of small for gestational age (SGA) infants.

Results: SGA developed in 11% of nulliparae. Although early Doppler screening was associated with high false positive results, yet two-stage screening avoided false negative cases. NDI was found to be a better predictor than other Doppler indices (A/C ratio, protodiastolic notch and RI). NDI improved, both sensitivity and PPV as determined by other Doppler indices. Conclusion: NDI measurements were clinically useful in predicting small for gestational age infant than other conventional Doppler indices.

OUTCOME OF PATIENTS WITH EARLY STAGE EPITHELIAL OVARIAN CANCER TREATED WITH NO ADJUVANT THERAPY

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Abstract

Objective: To determine the clinical outcome of women with surgical stage I epithelial ovarian cancer (EOC) treated with surgery alone.

Study Method: A retrospective chart review of early stage ovarian cancer patients between 1984 and 1997 was performed using the Alberta Cancer Registry data base. From this 75 women were identified with stage I EOC following comprehensive surgical staging with no further post operative therapy. Data extraction included demographics, prognostic factors, recurrence events and survival. Only patients with invasive, fully staged Stage I EOC without any adjuvant therapy were included in this analysis. Data was collected and entered using Excel and statistical analysis was done using S-Plus software.

Results: 75 patients with fully staged Stage I EOC were grouped according to presence or absence of risk factors. Group 1-32 patients (42.7%) had no risk factors. (Stage Ia, Ib G1&G2), Group 11-43 patients (57.3%) had risk factors, including 18 patients with clear cell type, 16 patients with cyst rupture, 3 patients with ovarian capsular involvement and 6 patients with Grade 3 histology.

Median age for the entire group was 49 years (19-81). Median follow-up 48.8 months (3.1-169.9). Recurrent disease was noted in 4 women in Group I (12.5%), and 4 women in Group II (9.3%) for an overall recurrence rate of 10.7% (95% CI 4.7-19.9%). In Group II, there were 2 recurrences each in women with clear cell cancer type and higher grade cyst rupture. There was no statistical difference in recurrence free survival (p value

=0.97). and overall survival (p value=0.537) between groups I and II.

The 3 year disease free survival and overall survival was 91.4% (95% C.I: 85.1 -98.2%) and 95.9% (95% C.I:91.4-100%) in all patients respectively.

Conclusion: An optimal surgical staging procedure is required to correctly diagnose those patients with Stage I EOC. In this series patients with early Stage I EOC after comprehensive surgical staging had excellent outcome despite no adjuvant therapy. It is suggested that patients with grade III tumors non-clear cell type, cyst rupture and capsular in-ubitiernent may be observed with no adjuvant postoperative therapy, but a randomized trial is needed to confirm this hypothesis.

Key Words: Early stage epithelial Ovarian Cancer, Optimal Staging. No adjuvant therapy.

**PLATELET COUNT/SPLEEN DIAMETER RATIO
AS AN EARLY NON-INVASIVE PREDICTOR
FOR THE PRESENCE OF ESOPHAGEAL
VARICES IN CIRRHOTIC PATIENTS**

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Abstract

Background: Many studies decided that decreased platelet count and splenomegaly were non-invasive predictors of the presence of esophageal varices in cirrhotic patients. This study aiming to determine whether the clinical variable inform of platelet count/spleen diameter ratio is a parameter linking thrombocytopenia to spleen size in order to detect early presence of esophageal varices away from screening endoscopy.

Methods: 264 cirrhotic patients were enrolled in this study in a period between March 2002 to May 2003. Fourteen patients were excluded due to hepatocellular carcinoma in 6; portal vein thrombosis in 5 and three patients refuse endoscopy. They were 202 male and 48 female with age ranged from 27-71 years (mean 52 + 12 years). Etiology of hepatic disease was mainly bilharzial and mixed cirrhosis and the least was post-hepatitic (40.8%, 42% and 17.2% respectively). After full clinical, laboratory and ultrasonic examination, maximum spleen bipolar diameter and platelet count were estimated, then upper endoscopy was done to all patients to decide presence or absence of esophageal varices which was classified into small or large varices.

Results: out of 240 patients, 164 (65.6%) had esophageal varices (EV). 34 (13.6%) of them had large varices and 130 (52.0%) had small one. 86 (34.4%) patients had no varices. There is no significant difference between both groups of patients (EV Vs NEV) as regard age and sex. while EV patients had significantly higher serum bilirubin as well as lower serum albumin level, prothrombin activity and platelet count compared with those patients with NEV. Spleen diameter was higher while platelet count / spleen diameter ratio was lower in patients with EV. Child- Pugh's

Ayman Menessy and Mahmoud Abd-Elshaheed

class shows significant difference between both groups, mainly in class B with $P < 0.001$

Conclusion: The platelet count/ spleen diameter ratio seems to be the highest accurate non-invasive predictor/or the presence of EV in patients with either compensated or decompensated liver cirrhosis. Also applying this ratio strategy for the non-invasive detection of EV would seem to be more cost effective than the "Scope all strategy".

**BILATERAL SKELETONIZED INTERNAL
MAMMARY ARTERIES GRAFTS AND STERNAL
WOUND COMPLICATIONS AFTER
CORONARY ARTERY BYPASS
SURGERY**

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Abstract

Objective; Evaluation of the effect of skeletonized BIMA harvesting on the incidence of sternal wound complications in patients undergoing coronary artery bypass graft (CABG) surgery. Method: From Jan. 1998 up to December 2002, 1327 patients underwent isolated CABG using either LIMA +SVGs: group A, n=450 or skeletonized BIMA +/-SVGs: group B. n=877 at cardiac surgery department, San Camilla de Leillis Hospital. Chieti University, Italy. Redo patients and patients 75 years old or more were excluded. Using the Propensity Score 622 of these patients (311 in each group) were selected with the same preoperative variables, that allowed us to study the effect of skeletonized BIMA on the incidence of sternal wound infections (superficial and deep). Results; Thirty days mortality was equal in both groups 3.296. The incidence of sternal wound complications was in group A 4.2% (superficial 1.9% and deep 2.3%). and group B 5.2% (superficial 2.6% and deep 2.6%) p=ns. The incidence of sternal wound complications in diabetic patients was in group A 5.2% (superficial 3.1% and deep 2.1%), in group B 6.7% (superficial 3.4% and deep 3.4%). p=ns Univariate analysis showed that obesity p .005, COPD p.014 and reoperation p .006 were independent risk factors for sternal wound complications. Deep wound infection was an independent risk factor for mortality p .003 and EMEs p .031. Conclusion; CABG surgery using skeletonized BIMA is a safe procedure that facilitates arterial revascularization with its proved long-term results. The incidence of mortality and sternal wound complications in patients using skeletonized BIMA is the same as in patients using single LIMA.

PREDICTIVE VALUE OF C-REACTIVE PROTEIN FOR CORONARY IN STENT RESTENOSIS

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Abstract

C-Reactive protein. (CRP) should be measured in all patients undergoing coronary angioplasty for prognostic stratification. Preprocedural levels are of proved efficacy. CRP levels can be used as a guide to therapy in PCI.

The aim of this study is to evaluate the predictive value of CRP plasma level for coronary in-stent restenosis (ISR).

This study included 60 patients who underwent successful coronary stenting . All patients included in this study were subjected to the following:

- Full history taking, thorough clinical examination, risk factors evaluation, 12 leads surface ECG, plain chest x-ray echocardiography, coronary angiography and laboratory investigations (Blood sugar level lipid profile and CRP) with follow up period for six month.*
- Patients were classified into two groups according to ISR*
 - * Group (I) with ISR included 22 patients (43.1%) and 22 lesions treated with 25 stents (45%).*
 - * Group (II) without ISR included 29 patients (59.9%) with 29 lesions treated with 30 stents (55%).*
- At follow up. focal ISR (<10 mm) was detected in 5 patients (22.7%). diffuse (>10 mm) in 7 patients (31.8%), proliferative ISR in 5 patients (22.7%) and total occlusion in 5 patients (22.7%).*
- In restenotic group (I) 8 patients (36.4%) were asymptomatic, two patients (9.1%) had unstable angina and 12 patients (54.5%) had stable angina.*
- In the non restenotic group (II) 22 patients (75.9%) were asyn*

ptomatic, four patients (13.8%) had unstable angina and three patients (10.3%) had stable angina.

- *Clinical, lesional and procedural variables are not associated with increased risk of ISR.*
- *The only variable for exclusion of ISR was a normal level of CRP in plasma (72 hours after coronary stenting). Its specificity was (100%).*

PREVALENCE OF CAROTID ATHEROSCLEROSIS IN PATIENTS WITH CORONARY ARTERY DISEASE

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Abstract

Many studies have identified the relationship between carotid atherosclerosis and coronary artery diseases. The rationale/or testing carotid artery stenosis in patients with coronary artery disease, have several benefits for early detection of asymptomatic carotid stenosis.

The aim of this study is to evaluate the prevalence of carotid artery disease in patients with coronary artery disease.

This study included 102 patients proved to be ischemic heart disease by coronary angiography, underwent carotid duplex. These patients classified into two groups according to carotid duplex result, group A (negative carotid duplex) and group B (positive carotid duplex).

All patients were subjected to the following: -

Full history taking, thorough clinical examination, laboratory investigations, 12 leads surface ECG, echocardiography, coronary angiography and carotid duplex.

Age was significantly higher in group B than in group A.

No statistically significant difference between both groups as regard EF% and history of myocardial infarction.

There was close association between carotid atherosclerosis and multivessel coronary artery disease.

Carotid atherosclerosis and degree of stenosis in left carotid artery was significantly higher than in right one.

From this study we concluded that there was a close relationship between coronary and carotid atherosclerosis both sharing more or less. the

same risk factors (smoking, diabetes mellitus, hypertension, hyperlipidemia and left ventricular hypertrophy), the degree of carotid atherosclerosis can be used as non invasive procedure for assessment of patients prepared for coronary angiogram.

REDUCED BLINKING RATE AS A CAUSE FOR COMPUTER VISION SYNDROME

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Abstract

Purpose : To correlate between eye complaints of computer users and reduced blinking rate.

Patients and Methods: This study was carried on 20 subjects .all were computer users complaining of one or more symptom of computer vision syndrome. Rate of blinking was calculated using digital web camera during work and during casual conversation. Tear break up time and Schirmer's test was done for all patients during work and at rest.

Results : Marked reduction in blinking rate /min from 16.5 to 4.8. Mean tear break up time changes during work was 10.85sec and at rest was 11.2sec the mean Schirmer's test was 13.5mm during work and 12.9 at rest.

Conclusion : Blinking rate is markedly reduced during computer use; giving an interpretation for the computer vision syndrome complaints .

Key words : computer vision syndrome .tearfilm dry eye .

**THE USE OF PLATYSMA MYOCUTANEOUS
FLAP AND AURICULAR CARTILAGE GRAFT FOR
CERVICAL TRACHEAL RECONSTRUCTION
AN EXPERIMENTAL STUDY IN DOGS**

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Abstract

Cervical tracheal reconstruction using platysma myocutaneous trap door flap strengthened with auricular cartilage was studied in 16 dogs.

Window defects involving 5 and 10 tracheal rings from the anterior tracheal wall were produced in different 2 groups of animals (group A and B). The results were evaluated by clinical follow up to 3 months. In group A, six of the 8 animals completed the scheduled follow up while in group B, five animals completed the follow up of 3 months without significant complications. Gross examination of the animals of both groups which completed the pre-established period of follow-up showed maintenance of the intraluminal diameter at the levels of the reconstructed segment. The mucosal cutaneous Junction was healed with no apparent granulation tissue. The free edges of the resected tracheal rings were closely attached to the rotated flap. Hair was fully grown and covered with mucous. Histologically, the flap was covered by stratified squamous epithelium which was closely attached to the free margin of the trachea by fibrous tissue.

The cartilage was seen intact with mature chondocytes. The use of platysma myocutaneous door flap strengthened with auricular autologous cartilage gives relatively good anatomic and functional results in reconstruction of tracheal defects. This may call for considering the clinical use of this type of flap in selected cases of tracheal wall lesions in human.

ENDER NAIL FIXATION OF FRACTURE SHAFT FEMUR IN HEAD INJURED CHILDREN

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Abstract

A study was done over twelve children suffering fracture femur and head injury, had been managed using ender nails as a method affixation. The patients had twelve fractures. The average age at the time of injuries was 7.4 years old. There were six males and six females. There were nine closed fractures and the remaining three were grad I open fracture. Clinical and radiological union occurred at an average of eight weeks after operation (range six to ten weeks). The nails were removed at an average of 7.6 months. There was average 0.75 cm lengthening at-the time of last follow up. There were no reported infections, delayed union or skin complication in dll twelve patients. The study showed that ender nail is an easy and safe option for children having fracture femur in the presence of head injury.

COMPARATIVE STUDY BETWEEN COLD AND WARM CARDIOPLEGIA IN CABG OPERATIONS

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Abstract

Objective: The objective of this study is to prospectively evaluate two different cardioplegia techniques: intermittent cold cardioplegia and warm blood cardioplegia.

Patients and Methods: Between During the period between August 2002 and April 2003. 35 consecutive patients undergoing elective CABG were studied in a prospective randomized trial. The patients were randomized in 2 groups: group I (20 patients) received intermittent cold crystalloid cardioplegia (15°C) and group II (15 patients) received undiluted warm blood (37°C), antigrade cardioplegia enriched with potassium and magnesium.

Results: Patients were predominantly male and the mean age was 56-5 years in group I and 54±5 in group II. There was no significant statistical difference between the 2 groups as regard the risk factors for CAD (smoking, hypertension, diabetes and hyperlipidemia). Preoperative ejection fraction (EF) was 54±2% in group I and 52±2% in group II with P=0.380338 (NS). The cross clamp time was 55±5 min in group I and 53±6 min in group II with P= 0.429421 (NS). The CPB time was 99-16 min in group I and 95± 17 min in group II with P=0.108781 (NS). Vasoconstrictive drugs were used in 7 patients (35%) in group I as compared to 5 patients (33%) in group II with P>0.05 (NS). The total volume of crystalloid solution infused during CPB was 1332±309 ml for group I and 1520±227 ml for group II with P=0.000263 (HS). Hematocrit value during CPB was 29±2% in group I and 32±3% in group II with P=0.037741(S). The patients

continued on mechanical ventilator for 9 ± 1 hours in group I and 8.5 ± 1 hours in group II. The postoperative chest tubes drainage was 460 ± 153 ml in group I and 530 ± 59 ml in group II with $P=0.086227$ (NS). Hematocrit value after CPB was $35\pm 4\%$ in group I and $34\pm 3\%$ in group II with $P=0.505103$ (NS). The patients stayed in the ICU for $2.9-0.6$ days in group I and 3.2 ± 0.5 days in group II with $P=0.334282$ (NS). There is no statistical difference between the 2 groups before aortic cross-clamping as regard serum lactate and troponin I. One minute after aortic unclamping, the serum lactate was 0.9 ± 0.3 mmol/l in group I and 0.7 ± 0.4 mmol/l in group II with no significant difference ($P>0.05$). Troponin I was 0.4 ± 0.3 $\mu\text{g/l}$ in group I and $0.6-0.3$ $\mu\text{g/l}$ in group II with $P>0.05$ (NS).

Conclusion: The findings of our study did not reveal any significant difference between the warm blood cardioplegia and the cold cardioplegia in terms of myocardial protection, either for clinical or biological data.

HOMOCYSTEINE IN TYPE 2 DIABETES MELLITUS : RELATION TO DIABETIC VASCULAR COMPLICATIONS

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Abstract

Background:- Hyperhomocysteinemia has recently been recognized as an independent risk factor for cardiovascular disease. Diabetes mellitus (DM) is known to increase the risk of atherosclerotic vascular diseases. Insulin resistance syndrome is characterized by clustering of cardiovascular risk factors like hyperinsulinemia, hypertension .etc, that has been hypothesized to play an important role in atherosclerosis. The reason for the high susceptibility of diabetic patients to atherosclerosis remain incompletely understood. Plasma homocysteine (HCY) status in diabetics is still a matter of controversy. Objectives:- The aim of our work was to study plasma level of HCY in type 2 diabetic patients and to study the relation of plasma HCY level 'to different diabetic vascular complications. Subject and methods:- The study included 40 patients with type 2 (DM) (aged 51.9 ± 6.3 years), and 15 apparently healthy controls matched in age and sex with the patients. Both groups were evaluated thoroughly and the following parameters were assessed, fasting blood glucose (FBG), post prandial blood glucose (PPBG), uric acid, serum creatinine, lipid profile, fasting plasma insulin (FPI), homeostasis model assessment of insulin resistance (HOMA-IR) and plasma HCY level. Results:- Our study revealed significant increase in systolic blood pressure (SBP), diastolic blood pressure (DBP), FBG, PPBG. plasma cholesterol, triglycerides (TG) and low density lipoprotein cholesterol (LDL-c) but significant decrease in high density lipoprotein cholesterol (HDL-c) in diabetic patients vs control group. We found also significant increase in plasma HCY, FPI and HOMA-IR in diabetic patients vs control group, all ($p < 0.001$).The study also

showed highly significant increase in plasma HCY in patients with macrovascular complications vs those with microvascular complications (31 ± 1.69 us 22.3 ± 2.36 , $p < 0.001$). In patients with type 2 DM there were significant positive correlation between HCY level and Age. SBP, DBF, FBG, PPBG, serum creatinine, total cholesterol. TG. LDL-c. FPI. proteinuria and HOMA-IR but significant negative correlation with HDL -c (all $p < 0.001$). Conclusion:- From this study, it is concluded that hyper-homocysteinemia is present in type 2 DM especially in patients with con-comitant macrovascular complications, and it can be considered as a definite risk factor for vascular complications in those patients.

**ASSOCIATION BETWEEN
SPONTANEOUS ECHOCARDIOGRAPHIC
CONTRAST IN DESCENDING AORTA AND
PLATELET FACTOR 4 AND D-DIMER IN
PATIENTS WITH NON-RHEUMATIC
ATRIAL FIBRILLATION**

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Abstract

The aim of this study is to determine the relationship between spontaneous echocardiographic contrast in the descending thoracic aorta and plasma levels of platelet factor 4 (PF4) and D-dimer as hemostatic markers in patients with nonrheumatic atrial fibrillation. This study included 60 patients (mean age, 58±3 years; 34 males) with nonrheumatic chronic atrial fibrillation who underwent transesophageal echocardiography (TEE). Plasma levels of PF4 as a measure of platelet activation and D-dimer as an index of thrombogenesis were determined on the day of TEE. 27 patients who had aortic spontaneous echocardiographic contrast (Ao-SEC) were older (61 years vs 57 years; $p<0.05$) than 33 patients without AoSEC. D-dimer levels were significantly higher in patients with AoSEC than in those without AoSEC, whereas PF4 was not different between the two groups. Although the prevalence of prior cerebral embolism did not differ between the two groups (22% in patients with AoSEC vs 18% in patients without AoSEC), the prevalence of peripheral arterial embolism was higher in patients with AoSEC than in those without AoSEC (11% vs 0%; $p<0.05$). The LA appendage peak flow velocity was significantly lower in patients with AoSEC than in those without AoSEC. The grade of AoSEC and the prevalence of LA thrombi were higher in patients with AoSEC than those without. Although aortic dimensions did not differ

between the two groups aortic atherosclerotic grade was greater in patients with Ao-SEC than in those without AoSEC. Multiivariate analysis revealed that mitral regurgitation, LA-SEC, and aortic atherosclerosis emerged as independent predictors of AoSEC. Conclusions: search for Ao-SEC in addition to LA appendage dysfunction with TEE could provide valuable information on prothrombotic state in patients with nonrheumatic AF. Patients with nonrheumatic AF complicated with AoSEC could have enhanced thrombogenesis; therefore, intensive anticoagulation with oral warfarin may be recommended for these patients.

SERUM ENDOTHELIN-1 IN OBESITY : THE EFFECT OF WEIGHT REDUCTION

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Abstract

Background and aim of work: Recent studies have shown that endothelin -1 (ET-1) is implicated in. avariety of pathological conditions including obesity, diabetes mellitus, essential hypertension and astherosclerosis.

The aim of the present work was to examine the relationship between ET-1 with some anthropometric and metabolic variables characteristic of insulin resistance syndrome. The effects of energy restriction either alone or in combination with metformin on serum ET-1, some anthropometric and metabolic variables characteristic of insulin. ooo resistance syndrome were also studied.

Subjects and methods: The study included 40 obese female patients with age ranging from 47 to 53 years. They were divided into two groups.

Group I included 30 obese female patients with either IGT or newly diagnosed type 2 diabetes with insulin resistance syndrome, group II included 10 obese females without IRS and were taken as a control. Both groups were matched in age, and BMI.

Patients in group I was divided into two groups. Group I received LCD (1200 kcal/day) alone. Group 2 received low calorie diet plus metformin (850mg twice daily). The study continued for 6 months.

All patients were subjected to thorough history taking and clinical examination stressing on weight, height, BMI, WHR & blood pressure. Fasting and 2 hour postprandial plasma glucose, HBA1c, HOMA-IR lipogram, and ET-1 were also assessed. These parameters were also evaluated after dietary intervention and metformin treatment.

Results: FYom this study, we found that patients with IRS were obese BMI (33.57 & plusmn1.7) with significant increase in WHR compared to obese controls. Also there was significant increase in SBP, DBF, fasting, post-prandial plasma glucose, fasting insulin insulin, HOMA-IR, total cho-

lesterol, LDL-C, TG & significant reduction in HDL-C in obese patients with IRS in comparison with obese controls. Also serum ET-1 were significantly increased in obese patients with IRS compared to controls. Also, there was significant correlations between serum ET-1 and some parameters present in IRS e.g. BMI, WHR, SBP, DBP, fasting and postprandial plasma glucose, HbA 1c, fasting insulin, HOMA-IR and lipid profile.

The following results were obtained after dietary intervention and metformin treatment: Significant decrease in BMI, WHR, blood pressure, fasting, postprandial blood glucose, HbA1c, HOMA-IR, total cholesterol, LDL-c in both groups with more reduction in LCD + metformin group. HDL-C also significantly increased in both groups with more significant increase in LCD + metformin group. ET-1 were significantly reduced in LCD + metformin group.

Conclusion: we can conclude that insulin resistance syndrome is a constellation of clinical and biochemical anomalies clustering in subjects with upper body fat distribution.

ET-1 also may be involved in the pathogenesis of many components of IRS e.g. insulin resistance, hypertension dyslipidaemia. Insulin stimulate ET-1 production and ET-1 decreased insulin sensitivity so, ET-1 may play another key underlying role in IRS through its close relation with insulin resistance. LCD and metformin are effective and safe measures in the management of obese patients with IRS as they improve many components of this syndrome. Their effects may be explained partly by their effect on insulin resistance and plasma ET-1.

TYPE I TYMPANOPLASTY WITH TRAGAL COMPOSITE CARTILAGE GRAFT : INLAY TECHNIQUE

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Abstract

Myringoplasty technique includes either an underlay or an onlay approaches using temporalis fascia or perichondrium as a graft material. Roland Eavy in 1998 described a transcanal cartilage butterfly inlay tympanoplasty technique in nine children under general anesthesia. This technique was established to be successful to close ear drum perforations, easy and rapid with no external canal incisions. The aim of this study, was to obtain our results with this technique. Material and Methods: Tragal cartilage with double layer of perichondrium was used to close small to medium sized drum perforations in 30 adult patients with unilateral inactive chronic suppurative otitis media. The study was conducted in the period between February 2000 to October 2002. We evaluated the take rate and hearing improvement. Results: The take rate was 100 % at a follow up period of an average 18 months and all cartilage grafts were dry and intact at the last follow up period. All cases showed hearing improvement in their audiometric results.

HEALTH ASSESSMENT FOR CHRONIC LIVER DISEASE

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Abstract

Background:- Assessment of health related quality of life (HRQOL) is not routinely reported in the literature on chronic liver disease (CLD). Few studies have examined quality of life (QOL) in those patients despite its significant functional impact. Objectives:- The aim of this work is to evaluate HRQOL in patients with chronic liver disease and to examine the correlation between chronic liver disease questionnaire (CLDQ) and the severity of liver disease, and their impact on the well being of these patients with this chronic illness. Subject and methods:- 77u study included 75 patients having CLD (aged 45.18 ± 6.5 years 40 male & 35 female) and 20 apparently healthy subjects as a control group (aged 42.11 ± 5.2 ,12 male & 8 female). Both groups were evaluated thoroughly and were asked to complete the CLD questionnaire which is designed to assess HRQOL in CLD patients. Results:- We found significant impairment of HRQOL in patients versus controls. The study also showed significant decrease in HRQOL in patients with higher Child Pugh (CP) class. We also found significant impairment in HRQOL in patients more than 50 years old compared to those younger than 50 years for all grades of CP classification. The study also revealed significant -ve correlation between HRQOL and clinical manifestation of liver decompensation, bilirubin and prothrombin time. There was significant +ve correlation between HRQOL and plasma albumin. As regard hepatic transaminases we found significant -ve correlation between AST and worry domain and significant -ve correlation between ALT and activity domain of CUD questionnaire. Conclusion:- From the previous results, it appears that chronic liver diseases substantially reduce HRQOL. Further, this impairment increases with dis-

ease severity. The ability of the CLDQ to detect associations with disease severity and its applicability to all types of liver diseases suggest that it can be an additional, important outcome in clinical trials designed to evaluate health changes due to disease progression and to provide therapeutic measures suitable for patients.

SUBCLINICAL HYPOTHYROIDISM. IS IT MILD THYROID FAILURE TO TREAT OR ACOMPANSATED STATE?

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Abstract

Background and Objective: Subclinical hypothyroidism "SCH" affects 5-15% of general population, however the need of lifelong L-thyroxin L-T4" therapy is still controversial. As the serum lipids and myocardium are main targets of thyroid hormone action, we investigate whether SCH induces serum lipids and cardiovascular alterations and we evaluate the effect of L-T4 replacement therapy on clinical symptoms, serum lipids and echocardiographic parameters in patients with SCH.

Methods: We studied 20 premenopausal women with subclinical hypothyroidism with age ranging from 18-45 years and 20 premenopausal euthyroid women as control group matched to SCH patients for age and body mass index (BMI). Patients were randomly classified into two subgroups each included 10 women, one group received L-T4 therapy and the other group receive placebo for the same period. All were subjected to through clinical assessment, assessment of tissues hypothyroidism using Zulewski Score, serum total cholesterol (TC) low density lipoprotein cholesterol "LDL-C", high density lipoprotein cholesterol "HDL-C" and triglycerides "TG" also echocardiography 2D, M-Mode and Doppler study.

Results: Our study revealed significant elevation of total cholesterol and LDL-C in SCH patients than control and after L-T4 therapy, there was significant improvement of both clinical score and serum lipids. Also SCH patients had significantly higher isovolumetric relaxation time "IVRT" and peak A value than control moreover preelection period "PEP" as well as PEP/ET were significantly longer in patients than controls and these changes fully reversed after L-T4 therapy.

Conclusion: SCH patients has negative clinical metabolic and echocardiographic effects and these negative effects are fully reversible after L-T4 therapy. Therefore subclinical hypothyroidism is better considered a condition of minimal tissues hypothyroidism than a compensated state. Indeed, L-T4 replacement therapy should be advised for these patients with the aim to prevent both the progression to frank hypothyroidism and the development of clinically significant myocardial dysfunction.

**PORTAL HYPERTENSIVE GASTROPATHY (PHG) :
CLINICAL, ENDOSCOPIC, AND PORTAL
HAEMODYNAMIC ASSESSMENT**

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Abstract

Portal hypertensive gastropathy (PHG) is an important complication of both generalized and segmental portal hypertension. The pathophysiology of PHG is still unclear. The aim of this study was to detect the prevalence of PHG and factors influencing its development. This study was conducted on 82 patients with portal hypertension. They were divided into 2 groups: Group I (non-bleeders) comprised 31 patients, serves as a control group. Group II (bleeders) comprised 51 patients and were subdivided into: Group IIa: 28 patients who were followed up by endoscopic sclerotherapy (EST) and Group IIb: 23 patients who were followed up by endoscopic band ligation (EBL). Endoscopy was repeated every 2 weeks till variceal obliteration. All patients were subjected to thorough history taking, clinical examination, laboratory investigations and Doppler ultrasonographic evaluation. In this study the prevalence of PHG was 75.6%, with no age or sex difference, with increased frequency and severity in patients with child-pugh class B than in patients with class A and C but without statistically significant difference. Again the prevalence of PHG was higher in patients with post-hepatitic cirrhosis than in patients with mixed cirrhosis and patients with pure bilharzialfibrosis but without statistically significant difference. The prevalence and severity of PHG was increased in the presence of esophageal varices, large variceal size, and presence of red signs, while the prevalence and severity was decreased in the presence of gastric varices; however, there were no statistically significant difference. The prevalence and severity of PHG were collectively

increased after endoscopic management especially with EBL without statistically significant difference. PHG was associated with insignificantly increased portal cross-sectional area, congestion index and portal blood flow. Also, it was associated with decreased portal maximum and mean velocities but the difference was statistically insignificant. We concluded that PHG is quite frequent in patients with cirrhosis, however, the factors studied are not good predictors for its presence.

BONY AND SUBMUCCSAL TISSUE REDUCTION OF INFERIOR TURBINATE: SUBJECTIVE AND OBJECTIVE EVALUATION

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Abstract

Chronic nasal obstruction is one of the most common symptom in the practice of Otolaryngology. Our study was to evaluate the value of the reduction of both the bone and the submucosal soft tissue of the inferior turbinates by using rocodebrider and microdriU. burrs in 70 patients with bilateral inferior turbinate hypertrophy. They were 36 males and 34 females. The age ranged between 17-65 years. All cases were performed at ORL departement,. Mansoura University Hospital in the period between 2002-2003. Subjective and objective evaluations were done preoperatively and 3months postoperatively. Subjective evaluation was done by questionnaires regarding nasal symptoms with score calculation. Objective evaluations were done by clinical examination, endoscopic evaluation. and CT scanning. Turbinates were graded into 1,11,111. Turbinates in grade II and III were included in the study. The preoperative mean of total symptom score was (7.99 ± 7.97) and postoperative was (1.79 ± 1.81) . Preoperatively most of turbinates were in grade in but after surgery most of them were in grade I. AU turbinates were decreased in size after the procedure. Bleeding occurred in 3 cases and required tight packing. Mucosal tears without mucosal loss occurred in 20 cases. We did not observe crustaon, synechia, foul odor or nasolacrimal injury. So by this technique patients showed both subjective and objective improvement.

LASER TRABECULOPLASTY AS A PRIMARY TREATMENT OF PRIMARY OPEN ANGLE GLAUCOMA

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Abstract

Objective: to evaluate the efficacy of laser trabeculoplasty as a primary procedure in the treatment of eyes with primary open angle glaucoma.

Methods: The patients included in this study were required to have an age 50 years or older, phakic eyes. cup/ disc ratio of 0.5 or more, polar notching or narrowing of the neuroretinal rim, and asymmetry of cup/ disc ratio of > 0.2 between the two eyes, glaucomatous visual field defects. open angle ongonioscopy, basal IOP \geq 18 mmHg, and a best corrected visual acuity of more than 20/80. Those patients underwent laser trabeculoplasty in one eye as primary treatment. The IOP was measured 1, 2 hours, 1 day, 1 week, 1, 2, and 3 months postoperatively.

Results: twenty eyes of 20 patients with primary open angle glaucoma were included in the study. The mean pre-laser IOP was 24.7 ± 2.7 mmHg, which was increased one hour after treatment to 27.6 ± 2.3 mmHg. After the 3 months, the mean IOP was 17.1 ± 3.2 mmHg with a mean reduction of IOP of about 7.6 mmHg which represent a 30.8% reduction from the initial IOP. No patient developed significant complications.

Conclusions: laser trabeculoplasty is considered a save, and effective procedure as a primary treatment of patients complaining of primary open angle glaucoma. It can be performed as an outpatient procedure without admission of the patient. The patients should be followed -up closely within the first hour of the procedure for any episodes of rise of IOP. Long term follow- up is recommended as there may be late rise of

Ehab M. Nafie

IOP that necessitate either repetition of the procedure or addition of topical pressure lowering drugs.

HEPATITIS C VIRUS INFECTION IN PATIENTS WITH SYSTEMIC LUPUS ERYTHEMATOSUS: CLINICAL AND IMMUNOLOGICAL STUDY

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Abstract

This study aimed at detecting the prevalence of HCV infection, in systemic lupus erythematosus patients (SLE) and its clinical and immunological impact on these patients.

Methods: 75 patients with SLE were randomly selected and 100 volunteers of blood donors were enrolled as a control group. After full careful clinical assessment, disease activity index (SLEDAI) was determined to all patients and all subjects were investigated by complete blood picture, liver enzymes, HCV antibodies by third generation ELISA. Subjects with positive antibodies were further investigated for viremia by HCV PCR. Immunological tests included C3, C4, ANA, Anti ds-DNA and cryoglobulin.

Patients were divided into 2 groups according to presence or absence of HCV antibodies.

Results: Thirty two of SLE patients (43%) had positive HCV antibodies compared to 12 (12%) of the control group. While only 8 (11%) patients with SLE had detected viremia by PCR. Eighty eight percent of SLE patients with positive HCV antibodies had higher frequency of high disease activity index, 75% had elevated liver enzymes, 59% showed hypocomplementemia and 63% had cryoglobulinemia. Cutaneous manifestations of SLE were found in 74% of SLE patients without HCV compared to 38% of those with HCV infection.

Conclusion: SLE patients had higher prevalence of HCV infection than the general population. SLE HCV patients have less cutaneous manifestation, more frequent high disease activity index, hypocomplementemia and cryoglobulinemia. Differentiating patients with HCV infection with clinical finding mimicking that of SLE (lupus like syndrome) from those-

with SLE associated with HCV infection is difficult. In this regard cutaneous manifestation could be a helpful sign. However, more specific serum markers for SLE are needed especially in our locality.

FLAP WITH REDUCTION PYELOPLASTY

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Abstract

Purpose: To evaluate the efficacy of flap pyeloplasty technique with excision, of redundant pelvis in the classic type of pelviureteric junction obstruction (PUJO)

Patients & Methods: 21 renoureteral units in 19 patients with classic type PUJO (no high insertion, no aberrant vessels, non tortuous ureter & with redundant pelvis) were operated upon with non-dismembered flap pyeloplasty with excision of redundant pelvis. Intravenous urography & were obtained in 8 cases only were carried out 3 months & yearly thereafter, follow-up period ranged from. 3-42 months.

Results: Intravenous urography showed improvement in the configuration of 7 renal units, stabilization in 12 & deterioration in 2. Excretory phase of renal isotope studies verified the deterioration in one renal unit for which percutaneous endopyelotomy was carried out.

Conclusion: Non-dismembered flap with reduction pyeloplasty is simple, safe technique & in need to be revived as it avoids torsion of ureter during anastomosis meanwhile ureteral blood supply is not interrupted. Nevertheless, its use should be restricted only to the classic type of PUJO.

LATE TRICUSPID REGURGITATION FOLLOWING MITRAL VALVE SURGERY: PREVALENCE AND POSSIBLE RISK FACTORS

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Abstract

Tricuspid regurgitation (TR) may progress or newly develop late after mitral valve surgery without significant mitral stenosis, regurgitation or other causes of left heart failure. The aim of this work was to study the prevalence and the possible risk factors for significant TR late after mitral valve replacement, as assessed both clinically and echocardiographically.

A total of 145 patients (87 women, 58 men; mean age 27.9±8.53 years) who underwent mitral valve replacement were studied. Analysis was based on preoperative and last postoperative Doppler echocardiographic evaluation. Significant TR was defined echocardiographically by grade 3+ or 4+ TR. Preoperative and intraoperative variables were used to evaluate predictors of TR development by multivariate logistic regression model.

Echocardiography revealed significant late TR (3+ or more) in 19 patients (13.1%) during the follow-up period. In univariate analysis, female gender, atrial fibrillation, huge left atrium, preoperative severe pulmonary hypertension and preoperative 2+ TR were significant risk factors for TR development, multivariate logistic regression model identified female gender, atrial fibrillation, preoperative severe pulmonary hypertension and preoperative 2+ TR as statistically significant predictors for late TR after mitral valve surgery.

In Conclusion: Significant TR late after mitral valve surgery occurs in 13.1% of patients Therefore, a lower threshold for tricuspid valve repair

should be considered at the time of initial surgery particularly in female patients with severe pulmonary hypertension or atrial fibrillation, even preoperative TR is 2+. Echo Doppler study can be considered the elective approach for preoperative evaluation of tricuspid involvement in patients with mitral valve disease.

SMALL INCISION NON-PHACO CATARACT SURGERY

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Abstract

Purpose: The aim of this study is to evaluate the safety and efficacy of small incision non-phaco manual ECCE technique as a procedure for cataract removal.

Subjects and Methods: Small incision non-phaco manual ECCE technique was performed in 20 cataractous eyes of 20 patients. The preoperative examination included visual acuity assessment, IOP evaluation, slit lamp biomicroscopy and A&J3 scan ultrasonography. Keratometry and pachymetry were performed by Orbscan slit scanning corneal topography system. Postoperatively, the follow-up schedule was for 3 months.

Results: Posterior capsule rupture occurred in 2 eyes (10%). Postoperative corneal oedema occurred in 13 eyes (65%); in 9 eyes (45%) the oedema was mild and resolved during the first week leaving a clear cornea. In 3 eyes (15%), severe corneal oedema occurred and resolved leaving a faint corneal haze. In 1 eye (5%) corneal decompensation occurred. Three months postoperatively, the mean surgically induced astigmatism was $1.12 \pm 0.16D$.

A BCVA of 6/12 or better was achieved in 16 eyes (80%) and of 6/18 in 2 eyes (10%). In the remaining 2 eyes (10%), one had a BCVA of 6/24 and the other had BCVA of $< 1/60$.

Conclusion: The results of the present study shows that small incision non-phaco manual ECCE can be a low cost, safe and effective technique and once the technique is mastered, it provides a good visual outcome and fast visual recovery.

CYTOLOGICAL SCREENING FOR CERVICAL CANCER IN AN EGYPTIAN PRISON

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Abstract

Objective: To determine the incidence and the risk factors of cytologically diagnosed squamous intraepithelial lesions of the cervix in an Egyptian prison and to compare it with Benha Faculty of medicine out patient clinic. Method: 200 females in an Egyptian prison and 200 females attending the gynecologic outpatient clinic of Benha faculty of medicine hospital were included in this study.

Cervical smear was taken from every female. Result: Squamous intraepithelial lesions were detected in 35% of prisoners, and in 11% of out patient females.

High grade squamous intraepithelial lesions were detected in 10% of prisoners and in 1.5% of out patient females. Risk factors for cervical intraepithelial lesions were young age of first coitus, multiple male sexual partners, heavy smoking and clinically suspicious cervix. Conclusion: Incidence of squamous intraepithelial lesions increase in female prisoners in comparison with out patient females. Early age of first coitus and multiple sexual partners are the most significant factors associated with occurrence of high grade squamous intraepithelial lesions in prisoners.

Keywords: Cytological screening; Cervical cancer; Prison

BIOLOGICAL PLATE OSTEOSYNTHESIS FOR TRANSITION ZONE FEMORAL FRACTURES

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Abstract

Less inuosiue plate osteosynthesis utilizing the biological sliding plate principle maintain all the soft tissue attachments as well as the length and aligenement which allow early bone healing and weight -bearing without the risk of implant failure. The purpouse of this study is to evaluate the results of open reduction and internal fixation, of transition zone femoral fractures (subtrochantric & supracondylar with or without intra-articular extension) using less invasive biological sliding plate principle in skeletally mature patients. Ten subtrochantric (ST) and ten supracondylar (SC) were the material for this study. DCS and DHS were used for subtrochantric fractures and DCS and condylar buttress plate were used for supracondylar fractures. The plate was fixed with 6 to 8 cortices on each side of the fracture. In some cases an external plate similar to the one inside were used as aiming device to allow insertion of screws closer to fracture site and into the middle fragment of segmental fracture. At the end of the follow-up (>12 months) all patients were evaluated regarding the hip & knee ROM. time of bone healing, time of weight bearing and any complications. Also Neers rating point system (1967) were, used for evaluation of the final results. RTA was the single major cause (17 cases). The average operative time was 93 minutes for ST &.102 FOT SC Fractures. The average blood losses was 300 ml for ST & 250 ml/or SC fractures. The average period for hospital stay was 15 days. No limitation of hip or knee ROM after ST and SC fractures except one case with SC fracture associated with vascular injury. The average time for radiological union was 17.63 weeks and the average time for full weight-bearing was 19.6 weeks. Shortening 1.2 cm and 15 degrees external rotation deformity were reported in two cases without any functional disability. According

to Neer rating system 75% were excellent. 20% were good. Only one case with fair results due to associated vascular injury. In conclusion; less invasive biological plate osteosynthesis proved to be feasible, worthwhile method for transition, zone femoral fractures. It is viable option for multi-fragmentary periarticular fractures with many advantages over conventional plating and interlocking nailing with excellent to good results in most of cases.

URETEROSCOPY OR EXTRACORPOREAL SHOCK WAVE LITHOTRIPSY FOR LOWER URETERIC STONE

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Abstract

Purpose: The optimal treatment for distal ureteric stones still controversial. While most urologists offer extracorporeal shock wave lithotripsy (ESWL), others strongly prefer ureteroscopy with or without mechanical fragmentation as the primary choice for treatment of lower ureteric stones. We present data from our department on these new modalities since 1998 to 2003.

Material and Methods: We treated 150 patients with distal ureteric calculi on Siemens modularis lithotripter and 150 patients by ureteroscopy using forceps, baskets or pneumatic lithoclast.

Results: Stone free rate three months post-ESWL was 90% with no complications. In ureteroscopic group of patients, the stone free rate was 95% with overall complications in 10 patients (6.7%)

Conclusions: At our department, ureteroscopy with or without mechanical fragmentation of lower ureteric stones is more efficacious method than ESWL. However the rarity of anaesthesia requirement and the absence of complications make ESWL as good as ureteroscopy. Our results may put ESWL as the second and in certain particular cases the first option in treatment of lower ureteric calculi.

Keywords: Endoscopy; Lithoclast; Calculi; Ureter.

THE TRANSFORMING GROWTH FACTOR β_1 AS A MARKER OF DIABETIC NEPHROPATHY IN PATIENTS WITH TYPE 2 DIABETES MELLITUS

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Abstract

Diabetic nephropathy is the single most common disorder leading to renal failure. Its annual incidence has more than doubled in the past decade to reach 44% of all end-stage renal disease, despite recent therapeutic advances. Thus, research into diabetic nephropathy pathophysiology that could lead to new treatment approaches is urgently needed. Transforming growth factor beta (TGF- β_1) still maintains a key role in the pathogenesis of diabetic nephropathy and its up regulation in diabetes may cause injury or transformation of tubular epithelial cells that contribute to interstitial fibrosis. The aim of our study was to assess the diagnostic and prognostic value of TGF- β_1 in diabetic nephropathy in patients with type 2 diabetes mellitus. The study was conducted on 80 subjects. They were divided into 4 groups: group I (control group), group II (normoalbuminuric diabetic group), group III (micro-albuminuric diabetic group), and group IV (macro-albuminuric diabetic group). All patients and control subjects were submitted to the following investigations: Urine analysis. Fasting blood glucose, post-prandial blood glucose, S. creatinine level, HbA_{1c}, quantitative determination of 24 hour urinary albumin, lipid profile including S. TG, S.HDL-C, S. LDL-C, and S.total cholesterol and lastly, S. TGF- β_1 level. It is apparent that increased serum level of TGF- β_1 is associated with increased risk of diabetic nephropathy in longstanding type 2 diabetes mellitus, especially if they have another risk factor like dyslipidemia. In addition, the results of our study proves that TGF- β_1 not only as a specific diagnostic factor, but also as a reliable prognostic factor. In

contrary to microalbuminuria, follow up of the S.level of the TGF- β_1 in the same patient could be useful to follow up the prognosis of the disease and to detect response to therapy.

THE EFFECT OF ELECTROMAGNETIC FIELD ON FETAL CARDIAC OUTPUT

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Abstract

The use of cellular (mobile) phone has been exploded world wide during last decade. Their rapid adoption by general public has resulted in an increased research interest in possible harmful health effects (Tahavanainen et al., 2004) . This common use of cellular phones ha.. given rise to concerns about the potential influences of electromagnetic fields on human physiology (Croft et al., 2002).

We studied the effect of electromagnetic fields emitted by cellular phone on fetal heart rate patterns , end diastolic volume . end systolic volume . stroke volume and cardiac output.

Our results showed that after use of mobile phones on different gestational ages (group I, II & III), significant increase in FHR and significant reduction of EDV, ESV, SV & Cop. The percent of reduction in EDV was more than the percent of reduction in ESV in all groups. This prominent decrease in EDV more than the decrease in ESV suggests that the decrease in SV is mainly due to decrease in contractility.

We conclude that the use of mobile phone has a negative effect on fetal heart so we recommend avoidance of cellular phone use especially in the early weeks of gestation and if necessary, the phone call should be less than ten minutes.

THE LARYNGEAL TUBE COMPARED WITH PROSEAL LARYNGEAL MASK AIRWAY FOR GYNECOLOGIC LAPAROSCOPY

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Abstract

We have compared the laryngeal tube (LT) and ProSeal laryngeal mask (PLMA) in 80 female patients/or the success rate of insertion, gas-leak pressure .pulmonary ventilation and the incidence of gastric insufflation. In a randomised clinical study, the laryngeal tube and ProSeal laryngeal mask were inserted after induction of anaesthesia and neuromuscular block. The cuffs were inflated until the intracuff pressure reached 60 cm H₂O. We measured adequacy of ventilation and the minimum airway pressure at which gas leaked around the cuff. The presence or absence of gastric insufflation was studied at an inflation pressure of 20 cm H₂O. Statistical analysis was with paired t test (parametric data), and Kruskal-Wallis test, Mann-Whitney rank sum test, and chi-square test (nonparametric data). P < 0.05 was considered significant.

In all cases, both airway devices were inserted successfully. It was possible to ventilate through the laryngeal tube and the ProSeal laryngeal mask in all patients. Peak airway pressure (P < 0.05) and airway leak pressure (P < 0.001) were significantly higher throughout the experiment wlien using the ProSeal laryngeal mask (PLMA) compared to the laryngeal tube (LT). The mean volume of air placed in the cuff to give the intracuff pressure of 60 cm H²O was 75 (SD 8) ml for the laryngeal tube and 19 (SD 4) ml for the ProSeal laryngeal mask. Differences between PLMA and LT groups for SpO₂, FIO₂ and P_{ET}CO₂ were not statistically significant before or during peritoneal insufflation No patient required tracheal intubation. Gastric insufflation was not detected in any patient. Sore throat was rare and considered minor .

We concluded that the laryngeal tube and ProSeal laryngeal mask provide adequate pulmonary ventilation and equal seal in the oropharynx as assessed by PETCO₂ without gastric distension during gynecologic laparoscopic surgery. The high airway pressure afforded by the PLMA and LT, and their separation of alimentary and respiratory tracts, represent significant advances for airway management.

STUDY OF THE PATHOPHYSIOLOGICAL MECHANISM IN PATIENTS WITH TYPICAL CHEST PAIN AND NORMAL CORONARY ARTERIES

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Abstract

Introduction.:- endothelial dysfunction, thrombogenesis and inflammation were studied as possible mechanisms in pathogenesis of cardiac syndrome-X through monitoring plasma endothelin-1, fibrinogen, vWF and CRP in patients with typical chest pain, positive stress ECG (clinical and ECG evidence of ischemia) and normal coronary angiography. The aim of this study is to evaluate plasma concentration of endothelin-1 and other factors in patients with typical angina pectoris and angiographically normal coronary arteries.

Subjects and methods: - This study included 50 patients complained of typical chest pain (group A), Another group of 20 healthy subjects were studied as control group (group B). Exercise test and coronary angiography were performed for all patients. Patients showing positive exercise ECG and having normal coronary arteries were selected. Blood samples were collected and examined for endothelin-1, fibrinogen, CRP and vWF.

Results : - Endothelin-1, fibrinogen, CRP and vWF were found to be significantly raised in that group of patients with syndrome-X in comparison with the control group, so they could predict and confirm diagnosis in patients with syndrome-X.

Conclusion & recommendation :- CRP, vWF, fibrinogen and ET-1 in that order were significantly high in patients with syndrome-X.

Thus assessment of their levels in serum may be highly needed to fulfill the diagnosis of cardiac syndrome-X.

VALUE OF EXERCISE TEST IN DETECTION OF MYOCARDIAL VIABILITY COMPARED WITH THALLIUM SCINTIGRAPHY STUDY

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Abstract

Management of patients who suffered acute myocardial infarction varies according to the absence or presence of myocardial viability. The study to assess the value of ST-segment elevation during exercise test in detection of viability after a first Q wave myocardial infarction treated with thrombolytic therapy within 12 hours of the onset of chest pain. Thirty patients were subjected to 2-D and M-mode full echocardiographic study, pre-discharge symptom limited exercise test and pre-discharge rest thallium-201 scintigraphy study. The results showed no significant relation between the depressed left ventricular ejection fraction, and the preserved myocardial viability. None of the risk factors for ischemic heart disease showed any significant relation with the presence of myocardial viability. There was a high incidence of myocardial viability among patients (86.7%) documented by thallium study. ST segment elevation during exercise test occurred in 14 out of those 26 patients with viable myocardium (53.8%). All those with ST segment elevation during exercise test showed viable myocardium by thallium. The study concluded that a pre-discharge symptom limited exercise test is considered to be of high specificity (100%) but of low sensitivity (53.8%) and low negative predictive value (46.2%). The absence of ST segment elevation during exercise test at the Q related leads, will require further sophisticated tests for detection of viability such as low dose dobutamine echo. thallium study or positron emission tomography.

SERUM FERRITIN; A NOVEL CORONARY ARTERY DISEASE RISK FACTOR

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Abstract

Strong epidemiological evidence is available that iron. is an importan; factor in the process of atherosclerosis. Therefore, it has been hypouw esized that the assessment of novel markers help to identify persons prone to premature CAD.

Purpose: The aim of the study is to assess the potential role offemtir as an independent risk factor promoting atherosclerosis.

Subjects cr-id methods: 45 patients u-'itn. CAD were studied and sub- di uided into 3 main groups; group 1: patients with chronic.. stable angi- na group 2: patients with unstable angina, group 3: patients with acute myo cardiac tnfarction and additional group 4 of 15 subjects as a control.

All patients and control were subjected to accurate history taking, dim cal examination and a variety of laboratory investigations in associator with s.ferritin and plasma malondialdehyde level (MDA).

Results: It was found that patients with, CAD whether chronic stable angina, unstable angina, or acute myocardial infarctton had a significan- ly higher serum ferritin level than the control subjects: mean s. ferriti: 702.46 ± 211.36 ng/L versus 195.66 ± 41.46 ng/L, P-value 0.001 also the CAD patients had a higher oxidative stress represented by lipic perox- idation product MDA (Malondiaidehyde): mean MDA in $\mu\text{mol/L}$ 0.780 ± 0.213 versus $0.375 + 0.198$ $\mu\text{mol/L}$ for the control subjects. P-value 0.01.

Conclusion: Serum femtin could be considered a novel, and indeper, dent CAD risk factor associated with increased oxidative stress in the form of increased lipid peroxidation and hence MDA.

CLINICAL AND BIOCHEMICAL CHARACTERISTICS OF LATENT AUTOIMMUNE DIABETES OF THE ADULTS (LADA)

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Abstract

Background; Adult patients with autoimmune markers at diagnosis of diabetes have a progressive decline in beta cell function and have a very high frequency of future need for insulin. All patients should therefore be offered a test for autoantibodies at the time of diagnosis of diabetes.

Aim: Our study was conducted to determine the clinical and biochemical characteristics of LADA patients to help in early pickup of these patients and hence early insulin intervention aiming at preventing those patients from reaching a point of severe metabolic deterioration before the start of insulin therapy

Patients and methods: 72 diabetic patients with age range 35-39 years. History taking, clinical examination, usual laboratory investigations, non-fasting C-peptide, glutamic acid decarboxylase antibodies (GAD-Ab) and Islet cell antibodies (ICA-Ab) measurement were done. All patients were then classified according to the type of antibody positivity into: +ve only for GAD-Ab, +ve only for ICA, +ve for both types and -ve for both types. A comparison was done between the clinical and laboratory characteristics of them.

Results: The prevalence of ICA and that of GAD-Ab was significantly higher in patients with low to normal C-peptide level than in patients with high C-peptide level. There is a significant inverse correlation between GAD-Ab & non-fasting C-peptide and between ICA and non-fasting C-peptide. Patients with +ve GAD-Ab had significantly lower BMI, blood pressure and HDL than those with -ve GAD-Ab. The prevalence of single

antibody positivity was higher than prevalence of multiple antibodies positivity. According to the type of antibody positivity, there was no significant difference between the 3 groups as regard age, disease duration.

BMI or midarm-circumference. but prevalence of peripheral neuropathy was significantly higher in patients with -ve Abs versus those with +ve either single or both Ab. Also. no significant difference was found in non-fasting serum C-peptide level, total serum cholesterol, serum triglycerides, and LDL cholesterol between the three groups. HDL cholesterol, systolic blood pressure, diastolic blood pressure were significantly higher in patients +ve only for ICA compared with those who were +ve for GAD-Ab or +ve for ICA and GAD-Ab. Most Ab -ve patients were on insulin therapy while most Ab +ve patients were on oral therapy and this was statistically significant.

Conclusion: Early detection of LADA and hence early insulin therapy may protect the remaining functioning, B-cells from further immune destruction. allow better glycemic control with less complications.

RESISTIVE INDEX OF THE SOLITARY KIDNEY: A CLINICAL STUDY OF NORMAL VALUES

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Abstract

Background/Aim: We studied changes in the renal hemodynamics and renal resistive index (RI) of the remaining kidney after live donor nephrectomy.

Patients and Methods: The study included 24 healthy live kidney donors (14 males and 10 females) with a mean age of 42 years. After donor evaluation Doppler ultrasound was done of the 2 kidneys the day before nephrectomy with RI measurement of each kidney. After nephrectomy the RI of the remaining kidney was measured on days 2, 4, 6, 8 and 10, and then at weeks 2, 3, 6 and 12. Mean RI of the remaining kidney before nephrectomy was compared to values at different time points after nephrectomy. Changes in the RI of the remaining kidney were screened at the follow up time points.

Results: There was no difference between the mean RIs of the right and left kidneys before nephrectomy (0.67 ± 0.04 and 0.67 ± 0.04 , respectively). The RI of the remaining kidney increased from 0.67 ± 0.04 before nephrectomy to 0.71 ± 0.06 on day 2 after nephrectomy, which was significantly different ($p < 0.0001$). The mean RI increase of the remaining kidney on day 2 was 0.05 ± 0.03 . The RI of the remaining kidney remained almost stable on days 4, 6, 8 and 10, and also at week 2. Comparison between the mean RI at weeks 2 (0.72 ± 0.05) and 3 (0.73 ± 0.05) showed a further increase of significant value ($p < 0.0001$). The mean RI remained stable at weeks 6 (0.73 ± 0.05) and at 12 (0.73 ± 0.05).

Conclusions: The RI of the remaining kidney significantly increases af-

ter nephrectomy of the contralateral kidney. Therefore, an RI value of 0.7 is not suitable to diagnose a pathological condition in a solitary kidney in adults.

Key words: Kidney. Nephrectomy, reference values, kidney Junction tests.

RESPIRATORY AND SKIN DISORDERS AMONG WORKERS IN WATER-BASED PAINTS INDUSTRY

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Abstract

Background: In the last few decades, painting industry started to develop new types of paints "water-based paints" to replace "solvent-based ones" which contain large amounts of solvents. Water-based paints involve an emulsion of acrylic resin, stabilizers (e.g ammonia) and preservatives (e.g. formaldehyde) dissolved in water, that are more safe than solvent paints.

Objectives and methodology: to determine the respiratory and skin disorders which may affect workers in such industry, a cross-sectional study was conducted among 20 male workers in water-based paints factory in Sadat City, Menoufiya Governorate in comparison with an equal number of non exposed subjects as control group. Both groups were matched for age, sex, socioeconomic standards, education, marital status and smoking habit. All individuals were subjected to structured questionnaire including personal, occupational and medical histories, clinical examination, and spirometric measurements and skin patch test.

Results: The prevalence of respiratory and skin manifestations and positive patch test results was significantly higher in exposed than control group. Also there was a trend of declining in spirometric measurements (FVC%, FEV₁%, FEV₁/FVC% and MEF%) reaching a significant level for MEF% among exposed workers than in control ones. Smoking had a synergistic effect with exposure to water-based paints leading to a signifi-

cant increase in the prevalence of respiratory manifestations and a significant reduction of mean ofMEF % among exposed smoking workers thanexposed non-smokers (108.73±3.5&115.0±4.2% respectively). There was a significant relationship between the increase in duration of exposure and increase in the prevalence of respiratory and skin manifestations and declining in MEF% among exposed workers in water-based paints industry. Usage of protective equipments was significantly valuable in minimizing the prevalence of skin manifestations (itching from 66.7% to 12.5% and dermatitis from 66.7% to 0%) among exposed personnel.

Conclusion and recommendations; work in the water-based paints industry was associated with increased prevalence of respiratory and skin manifestations and reduction of spirometric measurements. It is recommend that: smoking habit must be prohibited in this industry with stress on proper usage of personal protective equipments together with health education for workers in water-based paints about risk of exposure and steps to minimize the resulting disorders.

**ANTIBODIES TO CHLAMYDIATRACHOMATIS
HEAT SHOCK PROTEIN 60 (CHLAMYDIAL
HSP60) AND CHLAMYDIATRACHOMATIS
MAJOR OUTER MEMBRANE PROTEIN (MOMP)
IN WOMEN WITH TUBAL FACTOR
INFERTILITY**

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Abstract

Most of the acute infections of Chlamydia trachomatis are asymptomatic and are thus left untreated. In some women repeated or persistent C. trachomatis infection leads to scarring of the fallopian tube tissue and subsequent infertility because of occlusion of the tubes. Screening for C trachomatis specific antibodies is mandatory in diagnosing asymptomatic tubal factor infertility (TFI), particularly because it has been shown that C trachomatis is rarely isolated from the upper genital tract and clinical diagnosis requires invasive procedures not routinely available in general practice. C trachomatis has immunodominant proteins such as major outer membrane protein (MOMP) and Chlamydial heat shock protein 60 (chlamydial hsp 60) that most of the host's immune response is directed at. The aim of the present study was to evaluate the association between antibodies to C. trachomatis-specific IgG and chlamydial hsp 60 in women with TFI. This study was done on 45 women diagnosed as having TFI by means of hysterosalpingogram (HSG) and laparoscopy, and 31 wives of male factor infertility patients with documented patent tubes by hysterosalpingogram, as a control group. Their age ranged from 19 to 35 years. Antibodies to C. trachomatis-specific IgG were more prevalent in younger women (<25 years old) than older women (>25 years old). 77% versus

47% in TFI group, and 37% versus 27% in control group. Antibodies to *C. trachomatis* specific IgG were present in 29 (64%) of 45 women with tubal infertility compared with 10 (32%) of 31 control women. The difference was statistically significant ($P = 0.0019$). antibodies to chlamydial hsp60 were significantly higher in TFI patients (28 of 45; 62%) than in controls (6 of 31; 20%). The difference was statistically significant ($P = 0.0002$). Using the Spearman rank order correlation test, the antibodies to chlamydial hsp60 had a highly significant correlation to *C. trachomatis* specific IgG antibodies in TFI patients ($r_s = 0.53$, $P < 0.001$) and in controls ($r_s = 0.54$, $P < 0.001$). In conclusion. Antibodies to chlamydial hsp 60 and *C. trachomatis*-specific IgG are strongly associated with TFI and when used in combination at initial infertility evaluation, they would provide a rapid non-interventive means of diagnosing tubal factor infertility.

MODIFIED MAGPI FOR REPAIR OF DISTAL HYPOSPADIAS

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Abstract

Objective: To evaluate a modified technique of MAGPI for primary repair of distal hypospadias.

Patients and Methods; 32 patients with distal hypospadias meatal position was glanular in 15 cases, coronal in 13 cases and subcoronal position in 4 cases underwent primary hypospadias repair by modified MAGPI technique.

Results: The follow up period was ranged from 3 to 20 months mean (12 months). The mean age was 6.8 years ranged from 2 to 11 years. Modified MAGPI technique was successful in 29 boys (90.5%) with good cosmetic, functional results and vertical slit meatus. The complication rate was 9.4% (3/32), retraction of meatus in two cases and dehiscence of glanular flap in one case.

Conclusions: The modified MAGPI technique is applicable for repair of distal hypospadias, create a vertically oriented, and slit like meatus resulting in ideal cosmeses in the majority of selected cases and low rate of complications. It is suitable for an outpatient surgical setting.

TEAR FUNCTIONS IN PATIENTS WITH PTERYGIUM

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Abstract

Purpose: To investigate the tear flow and tear film stability in patients with pterygium.

Methods: Schirmer's I test, tear film break-up time (BUT) were studied in 57 eyes of patients with pterygium and compared with 57 eyes of normal healthy subjects representing the same age, sex and geographical distribution.

Results: Both the values of tear film break-up time (BUT) and Schirmer test were found to be significantly reduced in cases of pterygium indicating the inadequacy of tear film in these patients.

Conclusion: There is a correlation between pterygium formation and shortened BUT. Unstable tear film may contribute to the initiation of pterygium.