

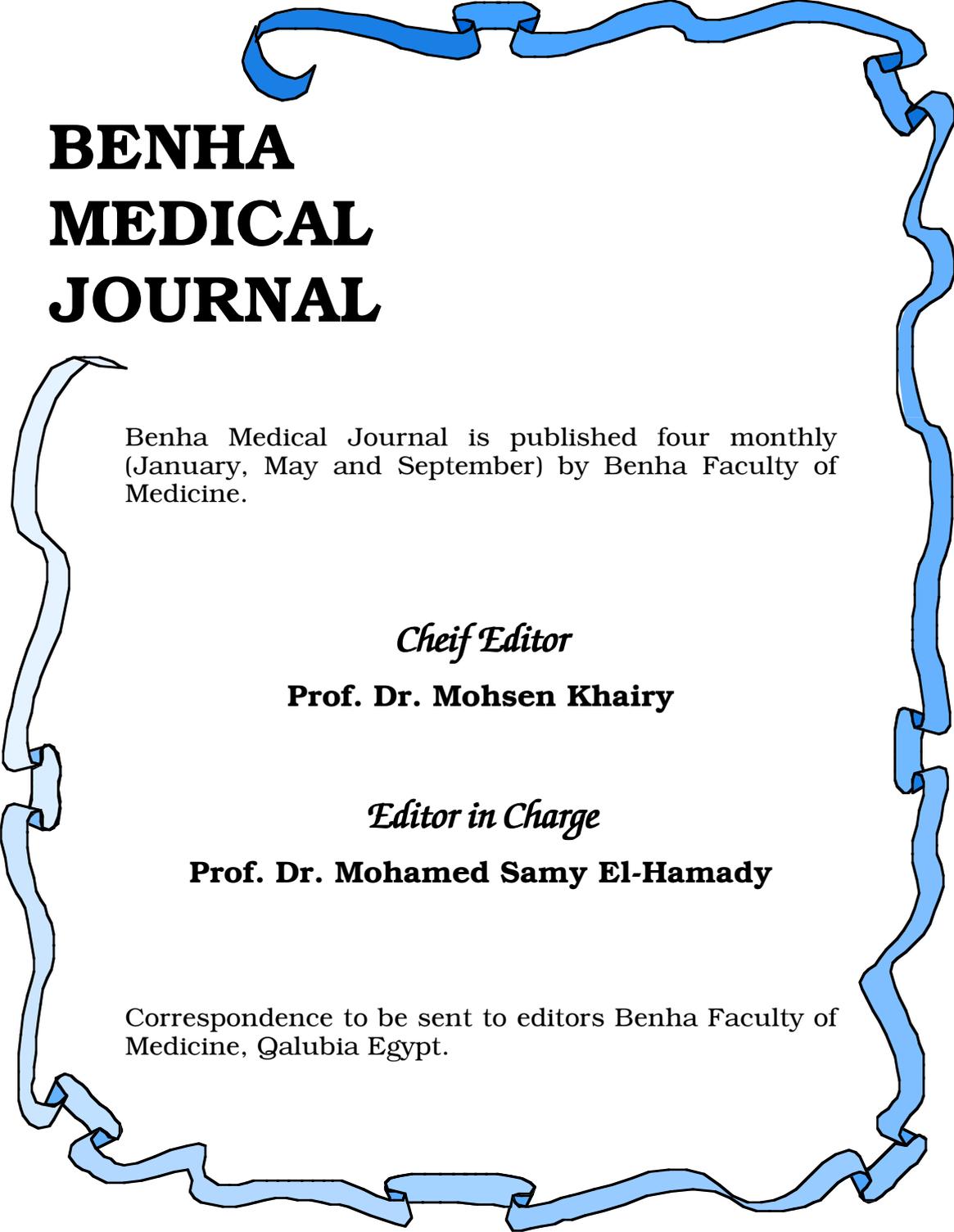
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**CLINICAL IMPACTS OF ORAL GASTROGRAFIN
FOLLOW THROUGH IN ADHESIVE SMALL
BOWEL OBSTRUCTION (ASBO).
(A PROSPECTIVE RANDOMIZED STUDY)**

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(The manuscript has been seen and approved by all authors) , Egypt

Abstract

Background: Many studies have shown that Gastrografin can be used for diagnosis of adhesive small bowel obstruction (ASBO) and for assessing the need for surgical intervention .However; several the studies have reported conflicting results. Therefore the aim of this study is to assess the diagnostic and therapeutic effect of Gastrografin in ASBO.

Patients and Methods: Altogether 110 patients with ASBO were randomized into control and Gastrografin groups. In the Gastrografin group, 100 ml of the dye was administered through a nasogastric tube. Obstruction was considered complete if the contrast failed to reach the colon on the 24-hour film. Patients with Gastrografin in the colon within 24 hours after dye administration were considered as partially obstructed and were submitted to non operative treatment. The patients were operated on if they developed signs of strangulation or failed to improve within 48 hours.

Results: The overall operative rate 14.5% in Gastrografin group versus 34.5% in control group: $P = 0.04$.The time from admission to resolution of symptoms was significantly lower in Gastrografin group (19.5 vs. 42.6 hours: $P = 0.001$) and the length of hospital stay shorter in Gastrografin group (3.8 vs. 6.9 days 0.002) and in non operative patients (3.1 vs. 5.1 days). Sensitivity, specificity, positive predictive value and negative predictive value for Gastrografin follow-through as an indicator for operative

treatment of ASBO were 87.5 %, 100 %, 100 %, and 97.9% respectively.

Conclusions: *Oral Gastrografin helps in the management of ASBO. Oral Gastrografin is safe and reduces the operative rate and time of resolution as well as hospital stay.*

Keywords: *Adhesions, Oral contrast, Exploration.*

EARLY ORAL FEEDING IN PATIENTS UNDERGOING ELECTIVE COLONIC ANASTOMOSIS

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Abstract

Background: Recent evidence seems to indicate that immediate post-operative feeding if feasible is safe after either laparoscopic surgery or laparotomy. This study is done to assess the safety, outcome of early oral feeding and shows factors affecting early postoperative feeding after colorectal procedures

Patient and Method: Between June 2005 and April 2008, 120 consecutive patients underwent elective colonic anastomosis were then randomized into 2 groups. Early feeding group began fluid on the first post-operative day and regular feeding group were managed in the traditional way- nothing by mouth until the resolution of the ileus.

Results: The majority of patients (75%) tolerated the early feeding. The time to first passage of flatus (3.3 ± 0.9 d vs. 4.2 ± 1.2 d) and stool (4.1 ± 1.2 d vs 4.9 ± 1.2 d) were significantly sooner in group 1. Hospital stay is significantly shorter in early feeding group (4.2 ± 0.2 d vs. 6.9 ± 0.5 d). Operative time and amount of blood loss had a significant impact on tolerability of early feeding while age, gender, type of operation, and previous abdominal operation had no significant impact

Conclusion: Early oral feeding after colorectal surgery is safe, tolerated by the majority of patients. Operative time and amount of blood loss has impact on the tolerability of early feeding

Key words: early feeding, ileus, colonic anastomosis, anastomotic leak

**EARLY EVACUATION OF POSTTRAUMATIC
CLOTTED HEMOTHORAX OR RETAINED
PLEURAL FLUID : RESULTS OF VATS
VERSUS CONVENTIONAL
THORACOTOMY**

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Abstract

Objective: To compare the outcome of VATS versus conventional thoracotomy in the early evacuation of posttraumatic clotted hemothorax or retained pleural fluid in patients with chest trauma after failure of the initial management with tube thoracostomy.

Patients and Methods: Between January 2001 and December 2005, fifty-four patients with posttraumatic clotted hemothorax or retained pleural fluid were included in this study. They were claimed to have clotted hemothorax or retained pleural fluid after 3 to 5 days posttrauma by chest roentgenogram and chest CT. The patients were divided into 2 groups, group I (VATS group) and group II (thoracotomy group). Group I patients (VATS group) included 23 patients, VATS was performed for evacuation of posttraumatic clotted hemothorax or retained pleural fluid. Group II patients (thoracotomy group) included 31 patients; conventional thoracotomy was performed for management of posttraumatic clotted hemothorax.

Results: There was no statistical significant difference between the mean ages of both groups, as the mean age of the VATS group patients was 33 ± 8 years, while it was 32.7 ± 7 years for the thoracotomy group patients. The mean preoperative ICT period was (6 ± 1.5 days VS 7 ± 2 days respectively). It was statistically non-significant. There was statistical significant difference (P -value ≤ 0.05) between the VATS group pa-

tients and the thoracotomy group patients in the mean operative time (70 ± 4 minutes VS 77 ± 6 minutes respectively), and, mean volume of analgesics given in the first 24 hours postoperatively (201 ± 17 mg VS 239 ± 18 mg respectively), in the mean ICT drainage in the first 24 hours postoperatively (219 ± 22 ml VS 230 ± 18 ml respectively), and, mean ICT period postoperatively (4 ± 1 days VS 6.5 ± 1 days respectively). There was also statistical significant difference between the 2 groups of patients in the mean hospital stay postoperatively (6 ± 3 days VS 10 ± 2.5 days respectively), and, the mean period to return to more or less normal activity (15 ± 1.8 days VS 23 ± 3.5 days respectively). Complications occurred less in VATS group of patients than that of thoracotomy group of patients. Prolonged air leak (13% VS 20%, respectively), postoperative empyema (4% VS 10%, respectively) and wound infection (0% VS 10%, respectively). Reoperation for management of postoperative empyema performed in one patient (4%) of the VATS group of patients and 2 patients (6%) of the thoracotomy group of patients

Conclusion: we concluded that early thoracoscopic intervention should be considered for management of posttraumatic clotted hemothorax or retained pleural fluid. Benefits include abbreviated thoracostomy tube drainage, shorter hospital stay after procedure, shorter overall hospitalization, as well as early return to normal activity. Moreover, early evacuation usually decrease the complications associated with retained hemothoraces, such as empyema and fibrothorax. Also, thoracoscopic surgery has fewer complications than the conventional thoracotomy.

**FLOW CYTOMETRIC STUDY OF T-CELL
SUBSETS AND COSTIMULATORY MOLECULES
IN CLINICAL FORMS OF HUMAN SCHISTOSOMA
MANSONI CHRONIC INFECTION**

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Abstract

Helminthic parasites cause widespread, persistent infections in humans. Schistosomiasis mansoni infected patients being in a chronic immune-activation state enabled us to investigate the effects of such immune activation on immune responses. We performed by flow cytometry a phenotypic analysis of peripheral blood T lymphocytes from 64 Schistosoma mansoni infected patients, in different clinical forms of the chronic disease. The main findings in the patient group in comparison with the non-infected controls were: (i) decreased CD3, CD4 and CD8 lymphocyte counts; (ii) elevated levels of activated T cells (CD4 expressing HLA-DR); (iii) decreased numbers of CD28+ CD8+ lymphocytes. These findings support the notion that chronic helminthic infections cause persistent immune activation that result in hyporesponsiveness and anergy. Such impaired immune functions may diminish the capacity of these individuals to cope with infections and to generate cellular protective immunity after vaccination.

KEY WORDS: schistosomiasis; clinical forms; T-cell subsets.

VALIDITY OF PARENTRAL NUTRITION AFTER MAJOR NECK SURGERIES

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Abstract

Objective: *Assessment of parentral nutrition as a substitute therapy to enteral nutrition after major neck surgeries with primary pharyngeal repair.*

Patients and Methods: *Forty patients were included in this study underwent various neck surgeries were prospectively randomized to receive either enteral nutrition (20) patients or parentral nutrition (20) patients. The patients were monitored for postoperative complications, wound healing, hospital stay, time to natural feeding and weight loss.*

Results: *The compared items were similar in both groups (mean duration of nutrition was 9.65, 9.9 days for TPN and NGT group respectively, mean hospital stay was 11.65, 11.9 days for TPN and NGT groups respectively, wound dehiscence and infection was in 15%, 20% in TPN and NGT respectively and also same result for pharyngocutaneous fistula, weight loss was 2.6 Kgm for TPN group and 2.39 Kgm for NGT group; p value was insignificant in all items. There were no major postoperative complications in both groups.*

Conclusion: *The present study reveals that there was no significant statistical difference between parentral and enteral nutrition when used for postoperative nutrition after major neck surgeries.*

ANESTHETIC MANIPULATIONS TO MINIMIZE BLEEDING AND IMPROVE OUTCOME OF FUNCTIONAL ENDOSCOPIC SINUS SURGERY

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Abstract

Objectives: *The present study was designed as a trial to improve field visibility during functional endoscopic sinus surgery (FESS) by means of positional changes and the use of controlled hypotension achieved through maintenance of anesthesia using remifentanil and either of propofol infusion (Total Intravenous; TI) or isoflurane inhalation (Combined Intravenous/Inhalational; CII).*

Patients & Methods: *The study included 32 patients; 23 males and 9 females, with mean age of 39.2±8.4 years and assigned to undergo FESS. Patients were divided randomly into two equal groups according maintenance anesthetic regimen: Group TI and Group CII. Each group was subdivided according to patients' position during surgery into supine and anti-Trendelenburg by 30°. Anesthesia was maintained in both groups by infusion of 0.5 µg/kg/min of remifentanil in addition to 10 µg/kg/min propofol infusion in Group TI or isoflurane 2% in Group CII. Patients were monitored non-invasively; before induction of anesthesia (T0) and 20 (T20), 40 (T40) and 60 min (T60) after induction of anesthesia, for mean arterial pressure (MAP) and heart rate (HR). The approach for FESS was conducted totally endonasal. The visibility of the operative field during FESS was evaluated using 6-points Fromme scale and total amount of bleeding as judged by the amount evacuated was also recorded.*

Results: *Both anesthetic modalities reduced blood pressure significantly and decreased heart rate throughout times of observation compared to preoperative levels with significantly lower MAP measures in anti-Trendelenburg compared to supine position. All surgeries were conducted completely without intraoperative complications and no extensive bleeding was recorded. There was a significant increase in the frequency*

of good field visibility with TI compared to CII anesthesia with significantly improved field visibility in patients maintained in anti-Trendelenburg position compared to supine position. Estimated mean blood loss was significantly less and the recorded field visibility scores were significantly higher in TI group compared to CII group. There was a negative significant correlation between the field visibility score and mean MAP and mean amount of bleeding. Using regression analysis, the use of hypotensive anesthesia was found to be a significant independent factor for improving field visibility, and the use of TI anesthesia was found to be significant determinant independent factor for induction of hypotensive anesthesia. The receiver operating characteristic (ROC) curve analysis judged by the area under the curve (AUC) defined the superiority of use of TI over CII anesthesia as independent determinant for field visibility.

Conclusion: *It could be concluded that maintaining patients in anti-Trendelenburg position and anesthetic manipulation using total intravenous anesthesia could minimize bleeding and improve field visibility during FESS and thus this combination of manipulations could be appropriate strategy for such type of surgery.*

CONJUNCTIVAL AUROGRAFT TRANSPLANTATION FOR MANAGEMENT OF PTERYGIUM

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Abstract

Purpose : *To evaluate the postoperative outcome and complication rate of free conjunctival autograft for the treatment of advanced and recurrent pterygia.*

Methods : *In a prospective, consecutive, noncomparative study, a series of eleven eyes of eleven patients who suffered fr primary nasal pterygium (6 eyes) or recurrent nasal pterygium (5 eyea) were included in this study. The patients' ages ranged from 28.0 to 47.0 years (mean, 35.9 years). All patients underwent pterygium excision combined with free conjunctival autograft. The mean follow-up period was 10.27 months (range 9 to 12 months). The main outcome measures were recurrence of pterygium and postoperative complicatios.*

Results : *Pteygium recurred to a small extent (0.5 mm) only in one eye (9%) of a patient with recurrent pterygim. There were no intra or postoperative complications.*

Conclusion : *Conjunctival free autograft is an effective surgical technique in preventing pterygium recurrence, ALthough it is time-consuming, in comparison with other techniques, it is not a difficult procedure.*

A MINIMALLY INVASIVE TECHNIQUE FOR MANAGEMENT OF MALLET FINGER FRACTURE

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Abstract

Purpose: A prospective study was conducted to evaluate the results of treatment of mallet fracture by extension-block Kirschner wire technique.

Material and methods: Eighteen patients (15 males & 3 females) with an average age of 30.8 years (range, 19 - 50 years) were managed for acute mallet finger fracture by extension-block Kirschner wire fixation. According to Wehbe and Schneider classification (1984), there were four cases type IB, twelve type IIB, and two type IIC. All patients were followed-up for an average duration of 18.1 months (8 - 31 months).

Results: Anatomical reduction was achieved in 89 % of cases. Fixation was stable enough to allow early active movement of metacarpophalangeal and proximal interphalangeal joints. The mean active range of motion of the distal interphalangeal was 1.1° hyperextension (range, 0° - 7°) to 83.1° flexion (range, 55° - 96°). Postoperative complications were detected in 11.1 % of cases and included loss of reduction, extension lag, and some difficulties at work. There were no cases of infection, skin necrosis, comminution of the fragment or non-union. Using the Crawford rating scale, there were 15 cases excellent, 2 good, and one fair.

Conclusion: Extension-block Kirschner wire fixation of mallet fracture is simple, less invasive, and effective in obtaining closed anatomic reduction and maintaining it until union with less morbidity.

Key words: mallet finger, extension-block.

STAPEDECTOMY : EFFECT OF TYPE OF ANAESTHESIA ON OUTCOME RESULTS

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Abstract

The ideal type of anaesthesia which could offer maximum hearing results and least complications still a point of controversy in stapes surgery. This study was conducted on 20 patients suffering from conductive hearing loss (CHL) due to otosclerosis. Patients were classified into 2 groups ; groupe (L) included 10 patients and were operated upon under local anaesthesia and group (G) , included 10 patients , operated upon under general anaesthesia . All operations were performed at Otorhinolaryngology department ; Benha Teaching Hospital.

Our aim was to study the effect of type of anaesthesia, whether local or general on the outcome results of stapes surgery. Our results showed hearing gain in low and mid tone frequencies in both groups with no significant difference of air-bone gap postoperatively, while the high tone frequency in group (G) had a lower bone conduction threshold compared with that in group (L) , indicating the more suffering of the cochlea. We concluded that stapes surgery is better to be operated under local anaesthesia than to be operated under general anaesthesia as it gives the surgeon and the patient good chance to protect the inner ear and to test the hearing on the operative table to the satisfactory level for both . However , general anaesthesia should be used with some individuals especially anxious ones.

Key words : *Sapedectomy , Bone conduction threshold , Local anaesthesia.*

**NEOADJUVANT CAPECITABINE-BASED
CHEMORADIOTHERAPY FOLLOWED BY
TOTAL MESORECTAL EXCISION FOR LOCALLY
ADVANCED RESECTABLE RECTAL CANCER**

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Abstract

Twenty three patients with resectable clinical stages II & III cancer rectum entered the study. All patients received concurrent chemoradiotherapy (CRT) based on capecitabine orally at a dose of 825 mg/m² twice a day throughout the concurrent radiotherapy (RT) course. A radiation dose of 45 Gy was given to the posterior part of the pelvis to include the tumor, the mesorectum, followed by a boost of 5.4 Gy limited to the tumor and corresponding mesorectum with a 2 cm margin. A total mesorectal excision (TME) surgery was performed after a rest period of 6–7 weeks from completion of the preoperative chemo-irradiation. Acute toxicities of concurrent chemo-radiotherapy were reversible and controllable. Grade 3 leucopenia was noted in one patient only. Acute cystitis, moderate grade, was developed in 3 patients. Neurological symptoms were noted in 3 patients. Bleeding during operation occurred in 8.7% of patients. One patient who showed clinical leakage failed conservative management and required surgical re-intervention. Downstaging rate for T-stage was 69.5% (16/23 patients). This rate was higher for N-stage constituting 84.2% (16/19 patients as 4 patients were N0). There was no increase in T- and/or N-stage (upstaging) recorded in this study. Complete pathological response was recorded in 2 patients only (8.7%). Sphincter-conserving surgery was successfully performed in 2 of 7 patients who were considered for abdomino-perineal resection before chemo-irradiation (28.6%). After a median follow up period of 24 months, overall survival rate was 90.9%

(20/22). Distant failure was higher than local recurrence (13.6% Vs 9.1% respectively). In conclusion; preoperative concurrent capecitabine and radiotherapy is considered to be a safe procedure and well-tolerated in patients with clinical stages II & III resectable rectal cancer treated with TME surgery. Successful high rate of sphincter-sparing procedure to some patients with low cancer rectum is possible after preoperative concurrent capecitabine and radiotherapy. Preoperative concurrent capecitabine and radiotherapy may reduce recurrence and improve survival rates.

Key Words: oral capecitabine, neoadjuvant chemoradiotherapy, cancer rectum.

**THE PROGNOSTIC SIGNIFICANCE OF
PROLIFERATIVE FACTORS, ANGIOGENESIS
AND MATRIX METALLOPROTEINASE IN
NON SMALL CELL LUNG CARCINOMA**

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Abstract

The outcome of surgical treatment of non small cell lung carcinoma (NSCLC) remains poor. In many patients the biological behavior of NSCLC does not follow a definite pattern, and can not be accurately predicted before treatment. Thus, the proliferative potential of tumor cells, angiogenesis and matrix metalloproteinase (MMP) are an important prognostic factors. In the present study, expression of cyclin D 1, CD34, MMP-2 and AgNORs count was estimated in a group of 80 surgically resected NSCLC using immunohistochemistry. The results were compared with clinico-pathological parameters including patients' survival. 41 cases (51.3%) revealed positive immunoreactivity for cyclin D 1. Cyclin D 1 overexpression is significantly higher ($p < 0.05$) in patients with lymph node metastasis (63.3% versus 15%), and with advanced pathological stages (stage I, 12.5%, II 37.5%, III 60% and IV 86.7%). Patients with cyclin D 1 positive immunoreactivity revealed a significantly shorter overall survival than patients with negativity. There is no significant correlation ($p > 0.05$) between CD34 score and histological type and grade, while there is significant positive correlation ($p < 0.05$) between high CD34 score and lymph node metastasis, distant metastasis, tumor stage and shorter overall survival. No significant correlations ($p > 0.05$) were found between MMP-2 expression and histological type, grade and lymph node metastasis. In contrast, the intensity of MMP-2 staining in tumor cells correlated significantly ($p < 0.05$) with tumor stage, and distant metastasis. Overall

survival was shorter in patient with MMP-2 expression, although the difference does not reach statistical significant. AgNORs count was found to correlate significantly ($p < 0.05$) with tumor grade, and the size shape and distribution pattern was found to show a characteristic difference between non-neoplastic and neoplastic lesions. In conclusion, an overexpression of cyclin D 1, angiogenesis, expression of MMP-2 and high AgNORs count are a poor prognostic factors for NSCLC, also MMP-2 and AgNORs can be used to differentiate between non-neoplastic and neoplastic lung lesions.

CARDIOVASCULAR AUTONOMIC FUNCTION TESTS IN HEALTHY AND DIABETIC SUBJECTS

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Abstract

Background: Diabetic autonomic neuropathy (DAN) is common chronic complications of diabetes mellitus (DM) that occur in nearly half of diabetic patients. DAN in patients with diabetes is an irreversible complication, but early detection is important, because the condition can't be reversed.

Aim: The present study was undertaken primarily to investigate cardiovascular autonomic functions in normal healthy individuals and patients with diabetes mellitus (type 1 and type 2 diabetes mellitus ; T1DM & T2DM), and to determine the relationship between diabetes and extent of autonomic function impairment.

Study design: Autonomic functions using five standard tests were examined in 40 diabetic patients and 40 age and sex matched controls. The extent of autonomic dysfunction was determined in the patients. All the patients and the controls were subjected to measurement of heart rate (HR) and P-R interval were monitored from lead II of the ECG and BP was measured by electrospigmomanometry .

Results: Significant ($p < 0.001$) increase in resting heart rate in T2DM (112 ± 10 bpm) than T1DM (65 ± 12 bpm) associated with significant decrease in HR variation during deep breathing T2DM (8 ± 3 bpm) compared to T1DM (18 ± 5 bpm) , significant decrease in HR response to standing in T2DM (0.7 ± 0.2 bpm) compared to T1DM (1.06 ± 0.2 bpm) , significant decrease in postural changes in SBP in T2DM (-15 ± 3 mmHg) compared to T1DM (-3 ± 8 bpm) and significant decrease in DBP response to hand grip in T2DM (6 ± 1 mmHg) compared to T1DM (20 ± 7 mmHg) within 2-5 years of both types of DM. Moreover, no significant difference between T1DM

and T2DM in cardiovascular autonomic function tests after 5 years of DM. Autonomic dysfunction was significantly more frequent in type 2 diabetes mellitus (T1DM) compared with type 1 diabetes mellitus (T 2 DM).

Conclusion: *This study showed that autonomic neuropathy is common in diabetic patients, and that it increases in severity with increase in extent of T 2 DM, and starts after 5 years in T1DM suggesting that diabetes mellitus contributes to these neurological derangements.*

AGE-RELATED CHANGES IN CAROTID VASCULAR RESPONSES TO NORADRENALINE AND NITRIC OXIDE SYNTHASE INHIBITOR

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Abstract

Aim: *the aim of the present work was to study whether age alters the constrictor responses evoked by the sympathetic transmitter Noradrenaline in the carotid circulation in the rat. Another aim was to test whether age changes the influence of tonically synthesised nitric oxide (NO) on arterial blood pressure (ABP) and on carotid circulation. Further, to investigate the effect of NO synthesis inhibition on carotid vascular responses evoked by noradrenaline in three age groups of rats.*

Study Design: *In anaesthetised rats aged 4-5, 10-12 and 42-44 weeks (young, mature, middle-aged respectively), carotid blood flow (CBF) and carotid vascular conductance (CVC) were recorded during infusion of noradrenaline ($2.5\mu\text{g}\cdot\text{kg}^{-1}$), before and after a bolus dose of the nitric oxide synthase inhibitor L-NAME ($10\text{mg}\cdot\text{kg}^{-1}$).*

Results: *In mature and middle-aged rats, noradrenaline infusion increased mean ABP to 180mmHg, but only to 150mmHg in young rats. Concomitantly, CVC decreased more in mature and middle-aged, than in young rats: CBF remained constant in young, but decreased in mature and middle-aged rats. NO synthase inhibition produced similar increases in baseline ABP in all groups, but decreased CVC and CBF more in mature and middle-aged rats. Following NO inhibition, noradrenaline infusion increased ABP to similar levels as before in young and mature rats, but to higher levels in middle-aged rats. Further, CVC fell in young and mature, but not in middle-aged rats, in whom CBF increased with ABP. Thus, in young rats there was a weak noradrenaline-evoked pressor response and decrease in CVC. By contrast, in mature and middle-aged*

rats, noradrenaline evoked a strong pressor response and decrease in CVC. In young and mature rats, NO seems not to limit the noradrenaline - evoked increases in ABP or decreases in CVC. However, by middle age NO limits noradrenaline-evoked pressor response and prevents breakthrough of CBF Autoregulation.

Conclusions: *The three age groups showed good autoregulatory response of carotid circulation during a pressor response induced by noradrenaline. However, the constrictor responses evoked by noradrenaline is weak in youngs before the age of sexual maturity. On the other hand, by middle-age and well before old age, the constrictor influences of noradrenaline in carotid circulation have begun to weaken. Moreover, by middle age, the dilator influence of NO helps to prevent breakthrough of Autoregulation of CBF at the upper end of the range.*

**STUDY OF MASTOID PNEUMATIZATION AND
ATTIC BLOCKAGE IN PATIENTS WITH CHRONIC
OTITIS MEDIA WITH EFFUSION USING
COMPUTED TOMOGRAPHY
AND TYMPANOMETRY**

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Abstract

Otitis media with effusion is a leading cause of conductive hearing loss. The organic sequelae of otitis media with effusion are changes in the tympanic membrane such as atrophy, retraction, and tympanosclerosis and changes in the mastoid, middle ear and inner ear. Prolonged otitis media with effusion carries the risk for further progression into adhesive otitis media, chronic suppurative otitis media, and cholesteatoma. The development of mastoid air cell system taking place during the first years of life, is disturbed by episodes of acute otitis media and secretory otitis media and the result is hypocellularity, which, accordingly, must be regarded as a sequel to pathologic influence on the middle ear. This study was carried out on 30 patients, with persistent chronic otitis media with effusion. Tympanometry and computerized tomography (CT) scan of the temporal bones were done for all patients pre-operatively. Axial CT, 2 mm slice thickness and 2mm interval were taken preoperatively for assessment of tympanomastoid pneumatization and the condition of aditus ad antrum. Ventilation tube (VT) insertion with or without adenoidectomy or adenotonsillectomy was performed to the unimproved patient. Every patient was followed up for 6 months with otoscopy and Tympanometry. The first visit was in the first week post operatively, the second visit was in the third month post operatively and the third visit was in the sixth month post operatively. In each visit we check up the presence and patency of each grommet tube by tympanometry (GSI auto Tymp) to measure the postoperative compliances. The result of our study showed

that patient with otitis media with effusion (OME) have significant sclerotic mastoid and the ear with high initial and or gradual increase in physical volume test (PVT) with time can be considered one of the prognostic factor in improvement in pathology of the middle ear mastoid. It has been stated that RST decreased the mastoid size and approximately half of the ear with chronic otitis media with effusion in adult have residual soft tissue density (RST) in mastoid cavity . Because of the degree of mastoid pneumatization is thought to reflect the gas exchange function of the mastoid cavity the middle ear pressure regulation through the infected mucosa might be impaired and retraction of the tympanic membrane occurred and insertion of V.T equalize the middle ear pressure and reversible mucosal changes are improved .

SUBLINGUAL VERSUS INTRAVENOUS NITROGLYCERIN FOR MANAGEMENT OF RETAINED PLACENTA

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Abstract

Objective : *This study was designed to investigate and compare the effect of sublingual versus intravenous nitroglycerin for management of retained placenta and to assess possible adverse effects of the treatment.*

Method : *Sixty patients in the third stage of delivery complicated by retained placenta were randomly divided into two groups : group (1) include 30 patients received 1 mg nitroglycerin sublingual , group (2) include 30 patients received 200 microgram intravenous nitroglycerin. Success rate for delivery of placenta , blood pressure , pulse rate and blood loss were examined and compared between two groups.*

Result : *All sixty women in both groups had successful delivery of placenta. There was no statistical significant difference regarding mean blood loss among both groups. ($P > 0.05$). No adverse effects of clinical importance were registered . Differences in haemodynamic parameters were significantly higher in group 2 compared to group 1 ($P < 0.001$).*

Conclusion : *sublingual or intravenous nitroglycerin seems to be effective for treatment of retained placenta without causing serious adverse effects .*

Key words : *nitroglycerin and retained placenta .*

**LONG-TERM EVALUATION OF
FUNCTIONAL AND ONCOLOGICAL OUTCOME
OF NEPHRON- SPARING SURGERY FOR
TREATMENT OF RENAL TUMOURS:
A SINGLE CENTER EXPERIENCE**

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Abstract

Objectives: *We present our experience with open nephron-sparing surgery (NSS) for treatment of renal masses.*

Materials & Methods: *We retrospectively reviewed the clinical and pathological data of 106 patients (108 renal units) who underwent NSS for renal masses between 1983 and 2007 at our institution. Patients' characteristics, the indication of surgery, the preoperative workup, the pathological reports, the postoperative complications, renal function and the oncological outcome were studied. All the patients were followed-up for a mean of 60.6±32.8 (range, 9.4-144.8) months.*

Results: *Renal cell carcinoma (RCC) was diagnosed in 83 patients (85 renal units), while benign lesions were found in 23. Patients were classified according to the indication of NSS into elective group (n =60) and imperative group (n = 46). Both groups were comparable regarding sex, clinical presentation, tumour site, and tumour laterality. Patients in the elective group were significantly younger and had significantly smaller tumours. Patients with RCC of both indications were comparable regarding Fuhrman grade while those with elective indication had significantly higher number of T1a tumours and those with imperative indication had significantly higher number of conventional tumours. Although perioperative complications were significantly more frequent among the group of imperative indication, they did not result in significant increase in hospital stay. The 5-year progression free and cancer specific survival were*

89.6±4.9% and 93.8±4.3%, respectively in the imperative group, while no tumour recurred in the elective group. Of patients in the imperative group, one quarter had major changes in serum creatinine compared to basal value and only 3 patients progressed to end-stage renal disease, while in the elective group all patients had either stable or minor changes in serum creatinine postoperatively.

Conclusion: NSS is a valid alternative in the treatment of small renal tumours. In patients with solitary kidneys, it can safely preserve renal function and effectively treat malignancy.

SPONTANEOUS BACTERIAL PERITONITIS : CLINICO-EPIDEMIOLOGICAL AND MICROBIOLOGICAL STUDY

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Abstract

Spontaneous bacterial peritonitis (SBP) is a frequent, severe and potentially life-threatening complication of cirrhotic patients with ascites. The clinical presentation of SBP depends on the stage at which the infection is diagnosed. In early stages, most patients are asymptomatic or present with insidious, non specific symptoms. As the disease progresses, patients show signs and symptoms of peritoneal infection.

Aims: *to determine the prevalent pathogens responsible for SBP in our locality and their sensitivity pattern, to test the efficiency of different culture techniques in microbial isolation, and to study the diagnostic predictors of such cases.*

Population and Methods: *Two hundred fifteen adults with cirrhotic ascites consecutively admitted to Tropical Medicine Unit, Mansoura University Hospital were screened for SBP. One hundred eight SBP episodes from 92 adult patients were compared to 88 cirrhotic ascites patients cross-matched with age and sex without SBP. Diagnosis of cirrhosis was based on clinical, biochemical, radiological and/or histo-pathological data. Ascitic fluid was subjected to cytological, biochemical examination and culture on both conventional and blood culture bottles at the bedside for bacterial identification and antimicrobial susceptibility testing. Diagnosis of SBP and its variants were made depending on ascitic fluid polymorphnuclear count ≥ 250 cell/ mm³ and/or monomicrobial growth in ascitic fluid culture without evidence of an intra-abdominal surgically treatable source of infection, and no recent use of antibiotics.*

Results: A total of 432 diagnostic paracentesis were performed in 215 cirrhotic patients with ascites. The prevalence of SBP was 25.02%. History of previous episode of SBP or history of paracentesis were significantly more frequent in SBP patients ($P=0.000$ and $P=0.001$) respectively also, Abdominal wall edema and redness (cellulitis), presence of ascetic fluid with numerous fine internal hyper-echoic particulates by ultrasonography and the aspiration of slightly turbid ascites were significantly more frequent in SBP patients ($P=0.01$, $P=0.031$ and $P=0.035$) respectively. Ascitic fluid protein levels and serum albumin levels were significantly lower and serum creatinine levels were significantly higher in SBP patients. ($P=0.009$, $P=0.03$, and $P=0.003$) respectively. Applying the model of logistic regression analysis between SBP and Non SBP clinical and laboratory data revealed that; previous SBP episode, low ascitic fluid protein levels, high serum creatinine and low serum albumin levels were significant predictors of SBP ($P=0.000$). Forty-nine (45.37%) episodes of SBP were detected by the conventional culture compared to 79 (73.15%) by modified technique with a significant P value <0.001 . Gram-negative bacteria were the cause of SBP in 46 (58.23%) culture positive episodes while Gram-positive bacteria were the isolated organisms in 33 cases (41.77%). *Escherichia coli* and *Staphylococcus aureus* were the most commonly detected organisms in 40 (50.63%) and 26 (32.91%) cases respectively. In this study, 31.65% of cultures were highly sensitive to Levofloxacin, 29.11% were sensitive to Cefotaxime, 20.25% were sensitive to Amoxicillin-Clavulanic acid, 18.99% were sensitive to Meropenem, 17.72% were sensitive to Ciprofloxacin and 15.19% were sensitive to Ceftazidime. On the other hand, antibiotic resistant rates to Ciprofloxacin were 25.32%, 24.05% to Ceftazidime and 21.52% to Cefotaxime.

Conclusion: Previous SBP episode, low ascetic fluid protein levels, high serum creatinine, and low serum albumin levels, all had a significant prediction of SBP. Beside cytological and biochemical examination, culture of ascitic fluid in blood culture bottles at bedside increases the sensitivity of SBP detection and must be a routine in every hospitalized patient with cirrhotic ascites. Gram-negative organisms still the prevalent microorganisms causing SBP but there is a significant recent increase in

Gram-positive pathogen with emergence of multidrug resistance especially for Ciprofloxacin, Ceftazidime and Cefotaxime. These recent changes may have an impact on guidelines for management and treatment of SBP in our locality.

Key words: Spontaneous bacterial peritonitis – Paracentesis – bedside inoculation - blood bottle culture.

**QUANTITATIVE AND QUALITATIVE
CHARACTERIZATION OF HEMATOPOIETIC
STEM CELLS FROM UMBILICAL CORD
BLOOD ACCORDING TO ALDEHYDE
DEHYDROGENASE ACTIVITY**

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Abstract

Background : Aldehyde dehydrogenase (ALDH) is a cytosolic enzyme that is responsible for the oxidation of intracellular aldehydes. Elevated levels of ALDH have been demonstrated in murine and human progenitor cells compared with other hematopoietic cells, and this is thought to be important in chemoresistance and purification techniques and an indication of the proper function of the cell. A Flowcytometric method for the assessment of ALDH activity in viable cells recently has been developed .

Methods : Forty six cord blood samples from mothers underwent normal delivery of full term infants were obtained, after informed consent. Mononuclear cells were obtained by Ficoll-Paque density centrifugation and ammonium chloride red cell lysis. Percentage of viable cells was determined by trypan blue exclusion dye. Cells were labeled with Aldefluor reagent (Stem cell technology, Vancouver., Canada) as described by the manufacturer. Cells were then stained with phycoerythrin (PE)-conjugated anti-CD34 (Miltenyi Biotec, Cologne, Germany) antibodies for 30 minutes at 4°C. Cells were washed and resuspended in phosphate-buffered saline (PBS) with 2% fetal calf serum. Cells were then analyzed on coulter epics flow cytometer.

Results: The mean percentage of ALDH enzyme expression among the CD34⁺ cells in the cord blood samples was 61.3% with a minimum of 28% and a maximum of 94.6%. Significant correlations were found between the wbc count in the cord blood samples and both the CD34⁺ cell count and the count of ALDH expressing cells, while, No correlation was

Magdy A. El-Barbary

found between the CD34⁺ cells count or the ALDH expressing cells count in the cord blood samples and either the sex or the weight of the newborn.

Conclusions: Identification and isolation of cells on the basis of ALDH activity provides a tool for their isolation and further analysis. In summary, a high ALDH-1 activity identifies CD34⁺ cells in cord blood.

Keywords: Umbilical cord blood, stem cells, ALDH, CD34.

**ASSESSMENT OF RISK FACTORS OF
INCIDENTAL PARATHYROIDECTOMY
DURING THYROID SURGERY :
A PROSPECTIVE STUDY**

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Abstract

Objectives: *To determine the incidence, risk factors and clinical relevance of incidental parathyroidectomy during thyroidectomy.*

Methods: *A total of 207 consecutive patients with benign and malignant thyroid disorders undergoing unilateral or bilateral thyroidectomy were included prospectively in the present study. Patients were divided into two groups according to incidental parathyroidectomy.*

Results: *210 thyroidectomies were performed. Group A included 26 patients with incidental parathyroidectomy and group B included 181 patients without incidental parathyroidectomy. The parathyroid tissue in the resected specimens was found in intrathyroid (57.7%), extrathyroid (23.1%) and central node compartment (19.2%) sites. On multivariate analysis, two factors sustained their significance independently; reoperation for recurrent goitre ($p=0.001$) and concomitant central neck dissection ($p=0.001$). There was no statistically significant difference regarding the occurrence of postoperative hypocalcemia between the two groups ($p = 0.55$).*

Conclusion: *Reoperation for recurrent goitre and concomitant central neck dissection for cancer thyroid may increase the risk of incidental parathyroidectomy. Incidental parathyroidectomy is not usually associated with symptomatic postoperative hypocalcemia. Most of removed parathyroid glands are intrathyroid, so incidental parathyroidectomy may be unavoidable.*

FUNCTIONAL OUTCOME AFTER SWENSON'S OPERATION FOR HIRSCHSPRUNG'S DISEASE (MANSOURA EXPERIENCE)

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Abstract

Introduction: *Hirschsprung's Disease (HD), one of the most common causes resulting in lower intestinal obstruction in children, is prone to be misdiagnosed because of its atypical clinical symptoms and inconspicuous morphological findings by barium enema x-ray.*

Recently, this situation has been largely ameliorated by increased comprehension of anorectal kinetics and improvement of instruments for measurement of anorectal pressure. By now, anorectal manometry has been regarded as a routine means for functional assessment and diagnosis of HD. It is accurate in nearly all cases of HD with characteristic absence of rectoanal inhibitory reflex. Different surgical modalities of treatment are available and Swenson's operation is one of the surgical procedures done for HD. Anorectal manometric findings may change after Swenson's operation with improvement of rectoanal inhibitory reflex in some cases.

Aim of the Study : *to evaluate functional results after Swenson's operation for HD using anorectal manometry.*

Patients and Methods: *Between 1996 and 2005, fifty-two patients were diagnosed as HD and operated upon by Swenson's operation in Gastroenterology Center, Mansoura University. There were 33 males (63.46%) and 19 females (36.54%) with a mean age of (3.29±1.6), range (2-17 years). Anorectal manometry & rectal muscle biopsy were done pre-operatively for diagnosis but after operation anorectal manometry was done 6months and then yearly.*

Results: *All (52) patients showed absent rectoanal inhibitory reflex on manometric study with relatively higher resting anal canal pressure and*

within normal squeeze pressure. Postoperatively, there were 35 continent patients (67.31%) with 11 patients (21.15%) showed minor incontinence and 6 patients (11.54%) with major incontinence. On the other side, there were 5 patients (9.62%) with persistent constipation after operation (3 due to anal stricture and 2 due to residual aganglionosis). Postoperative manometric study showed some improvement in anal sensation with the rectoanal inhibitory reflex becoming intact in 6 patients (11.54%) 4 years after operation.

Conclusion : *Anorectal manometry is a more reliable method for diagnosis of HD than barium enema x-ray but for final diagnosis, it is reasonable to combine anorectal manometry with tissue biopsy. Functional outcome after Swenson's operation for HD may improve in some patients complaining of incontinence or constipation. Anorectal manometry may show improvement of the parameters after Swenson's operation with development of rectoanal inhibitory reflex in some patients.*

**LEVEL OF PARENTAL CARE AND EARLY
INTERVENTION AMONG HEARING
IMPAIRED SAUDI CHILDREN**

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Abstract

Early identification and prompt intervention are crucial for improved outcomes in hearing impaired children. Parental awareness and care of their hearing impaired child is a valuable primary resource for early detection and intervention. This study was done to describe the level of parental care through studying the factors that are involved. 134 hearing impaired children from the age of 6 to 14 years old were included in the study all were girls studying at Al-Amal Institute. Questionnaires were prepared and sent to their parents including information about social level, mother's education and if working or not, time of discovering the hearing disability, use of a hearing aid, age at which hearing aid was fitted and improvement noticed, cost of the hearing aid, parent's attitude towards the hearing aid and rehabilitation at school or hospital, children's attitude and effect on speech and language. Clinical and audiometric examination was done as well as language evaluation. Results were correlated with the language performance and all showed significant correlations. This proves that these factors that describe the parental care are strongly related to the language outcomes.

CARDIO-RESPIRATORY PRE-PARTICIPATION SCREENING OF COMPETITIVE ATHLETES

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Abstract

Objective: *Substantially, it was to highlight how valuable is the routine use of ECG, echocardiography and spirometry among the pre-participation routine examinations for the athletes to differentiate between normal physiological and the pathological changes that could face down the performance of the athletes during competitions or even more might endanger their lives.*

Design of the study: *The study was conducted among some junior athletes who were attending at Sports Medicine center in Madinat Nasr for regular assessment of their physical fitness. The study sample included 120 junior athletes from the national team of football (< 17 years and < 19 years). Another 95 non-athletic healthy individuals from the school for talented students were selected to represent the control group. They were classified into two groups, each one was matching with a corresponding athletic group in age. Age, body weight, height and body mass index were recorded. Ergometric test with Spirometry, ECG and echocardiography were applied for all the participants. Both groups were matching with their corresponding controls concerning age and height, while the weight & body mass index were found to be statistically significantly higher among their corresponding controls.*

Findings: *It was proved in our study that athletes do have statistically significantly lower resting heart and maximum heart rates with higher VO₂ max comparing with the non athletes. The anaerobic threshold values were statistically significantly lower among the athletes that were*

found to be achieved after prolonged times of performance if compared with the control groups. All the spirometric parameters were statistically significantly higher among the athletes. ECG and echocardiography, revealed a normal and accepted physiological changes that can be acquired due to prolonged training.

Recommendations: *Based on the results of the study, it's deemed that spirometry, ECG, and echocardiography must be tabled among the pre-participation routine examinations of the athletes as a sensible approach to differentiate the physiological changes from the pathological ones, which subsequently can mitigate the usual raised concern of sudden death of athletes during prolonged competitions.*

POST-EXTUBATION LARYNGEAL SPASM IN CHILDREN IS NO LONGER A NIGHTMARE

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Abstract

Background: *postextubation laryngeal spasm in children is no longer a nightmare. Laryngospasm in children after extubation is ever happening. Sometimes it is severe and alarming and not easily amenable for treatment and may pose great morbidity. Opioids given prior to noxious stimuli, ameliorates or prevent physiologic responses. This study was conducted to assess safety and efficacy of pethidine on post extubation laryngospasm.*

Method: *Forty children ASA 1 and II aged 3-12 years undergoing minor and moderate surgery were included in this study. Approval of ethics committee and parental consent were taken. Standard anesthetic regimen of fentanyl 1-2mg/Kg.⁻¹ followed by propofol 2-3mg/Kg.⁻¹ and atracurium 0.5mg/Kg.⁻¹ were used. Maintenance with sevoflurane(end tidal 1.5 MAC). Patients were ventilated to ETCO₂ 32mmHg. All patients ;. were monitored for SaO₂, NIBP, ECG and ETCO₂. Children were divided into 2 groups; Pethidine group which received pethidine 0.5 mg/Kg.⁻¹, 10 minutes towards end of surgery. Control group received 5 ml NSS. Children were extubated in recovery position Any adverse airway events; cough, stridor, breathholding, apnea, desaturation and laryngospasm were recorded. Emergency profile and awakening time were recorded and all results tabulated. Results: Control group showed incidence of cough (25%), stridor (10%) laryngeal spasm (20%) and desaturation(15%) vs only one case of mild cough in pethidine group. Emergence was excellent in 95% in pethidine vs 75% in control. Awakening times were groups (5.3,9.5vs5.2,10.2min)in P&C groups. Conclusion, pethidine prior to extu-*

Fahmy A. Fahmy

bation almost prevents laryngospasm without undue prolongation of awakening time with overall excellent uneventful recovery.

Key words Adverse airway events; laryngospasm, Opioids, pethidine.

PENTACAM AN ACCURATE TOOL FOR POST LASIK FLAP THICKNESS ASSESSMENT

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Abstract

Purpose : *To assess corneal flap thickness post LASIK by using OculusHR pentacam imaging .*

Methods: *This clinical trial included 18 eyes of 11 all patients who underwent LASIK for myopia Preoperatively, the central corneal thickness(CCT) measurement using ultrasound pachymetry (Sonomed Inc, Lake Success, NY).*

..Preoperative Oculus pentacam pachymetry and topography was done for all cases.

Moria microkeratome M2 was used for creating flap using head 130. After creating the flap the corneal thickness of the remaining tissues was measured in the central point to find the thickness of flap by subtracting this value from total corneal thickness .

One week post operative Pentacam imaging using the fine corneal mode 100 scan images was done covering the cornea in 360degree in 2 seconds.

Results: *The mean ultrasonic flap thickness after flap elevation was $144.72 \pm 18.6 \mu\text{m}$. The mean flap thickness measured by pentacam was $150.28 \pm 20.3 \mu\text{m}$ one week postoperative.*

Conclusion: *Pentacam imaging is a non contact accurate method for measuring actual flap thickness postLasik.*

CORRELATION BETWEEN FLUORESCEIN ANGIOGRAPHY, OPTICAL COHERENCE TOPOGRAPHY AND VISUAL ACUITY IN DIFFUSE DIABETIC MACULAR EDEMA PRE AND POST INTRAVITREAL INJECTION OF TRIAMCINOLONE ACETONIDE

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Abstract

Purpose: to study the correlation between macular thickness by OCT, macular edema by FA and visual acuity finding in eyes with diffuse diabetic macular edema pre and after intravitreal injection of triamcinolone acetonide.

Patients & Materials and Methods: This study included 40 eyes of 28 diabetic patients diagnosed as they had diabetic macular edema.

Group I: included 20 eyes with primary diabetic macular edema.

Group II: included 20 eyes with refractory diabetic macular edema

All patients received 4mg of intravitreal triamcinolone acetonide (IV TA). Full ophthalmological examination, Fluorescein angiography and measurement of macular thickness (MT) by OCT were done to all cases preoperatively and 1, 3 and 6 months postoperatively.

Results: pre IVTA In group I: there was strong negative correlation between FA & VA ($r = -0.519$) and weak correlation MT & VA ($r = -0.421$) while the correlation was positive between MT & VA ($r = 0.924$).

In group II: there was negative correlation between FA, MT and VA ($r = -0.594$ & $r = -0.672$) but the correlation between MT and VA was positive. after IVTA all over the follow up period there was positive correlation between FA & MT in both groups. While the Correlation between BCVA & FA in Group I was negative correlation at 3rd and 6th month, the correlation in Group II was statistically non significant. The correlation between MT and VA in group I was statistically significant 3 months after injection in both groups, however its effect decreases and recurrence of macular edema occurred 6 months after injection.

In group II the correlation between MT and VA was statistically non significant

Conclusion: *there is strong correlation between VA, OCT and fluorescein leakage. Visual acuity depends mainly on the macular perfusion not the amount of edema .OCT can differentiate between diffuse macular edema and cystoid macular edema diagnosed by fluorescein angiography.*

ECHOCARDIOGRAPHIC ASSESSMENT OF CARDIAC DYSFUNCTION IN CHILDREN WITH CHRONIC RENAL FAILURE UNDER REGULAR HEMODIALYSIS

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Abstract

A large number of pathological changes have been described in the heart of uremic patients, such as; hypertension, left ventricular hypertrophy, vascular heart disease (mitral & tricuspid regurge), heart failure, uremic pericarditis, pericardial effusion, uremic endocarditis, Arrhythmia and atherosclerosis.

The most common pathological condition of the heart in chronic renal failure is diastolic dysfunction, usually due to complication of fluid overload.

In the present study, we report on assessment of cardiac functional abnormalities present in patients with chronic renal failure using echocardiography. Exclusion criteria were presence of primary cardiac disease or concomitant disease that might affect the heart.

Overall 20 patients with the presumptive diagnosis of end stage renal disease (ESRD) on regular hemodialysis and another 20 healthy children as a control group were included in this study which was carried out in the pediatric department, Benha university Hospital. Their ages varied between 9 and 18 year. Nine were males and 11 were females. They are subjected to: Basic laboratory investigations including complete blood count (CBC), blood urea nitrogen (BUN), creatinine, albumin, electrolytes, estimation of glomerular filtration rate (GFR) level and Echocardiography. Evaluation of systolic functions of the heart (ejection fraction, fractional shortening and left ventricular mass index) showed only significantly higher left ventricular mass index (LVMI) in comparison with the control group.

Evaluation of diastolic function (E wave velocity, A wave velocity, E/A ratio and Em) on the left side of the heart showed significantly lower values while on right side of the heart only E wave velocity was significantly lower. Evaluation of myocardial performance index (MPI) was significantly higher in studied patients. Low GFR show significant correlation with LVMI, diastolic functions on the left side of the heart and MPI.

EARLY VERSUS LATE REHABILITATION OF ERECTILE FUNCTION AFTER NERVE-SPARING RADICAL CYSTOPROSTATECTOMY : A PROSPECTIVE RANDOMIZED STUDY

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Abstract

Aim : *To assess the value of early rehabilitation in patients who underwent nerve-sparing radical cystoprostatectomy based on a prospective randomized trial.*

Material & Method : *Between March 2003 and March 2005, Twenty one patients underwent nerve-sparing (NS) cystoprostatectomy. Preoperative sexual function of all patients was evaluated by International Index of Erectile function questionnaire (IIEF) and penile Duplex ultrasound (PDU). Patients who did not recover spontaneous erection at the 2nd month postoperatively were randomly divided into 2 groups; Group (1) received the erectogenic therapy at the 2nd month postoperatively and group (2) started it at the 6th month. The pharmacological therapy constitutes of sildenafil citrate 50mg twice weekly to be increased to 100mg if the patients did not obtained an adequate response. If this regimen failed we shifted to ICI of PGE1. The treatment continued for 6 months in both groups. The erectile function status was evaluated at the end of the treatment program by IIEF questionnaire and PDU.*

Results : *Three patients (14%) regained their spontaneous erection within 2 months postoperatively and the remaining 18 were divided randomly into two groups. Six out of nine (66.7%) patients recovered unassisted erection after treatment in the first group compared to 3 out of 9 (33.3%) patients in the second group. Two patients in the first group and 3 patients in the second group still needed sildenafil therapy on demand basis. The remaining 4 patients are still using ICI of PGE1 on demand. At final evaluation, a significant improvement was found in the EF, the intercourse satisfaction and overall satisfaction domains ($P=0.02,0.03$ and 0.02 respectively) in patients in the early rehabilitation group compared*

with those in late rehabilitation group. Regarding PDU findings, significant improvement in EDV was elicited in the early rehabilitation group compared with the pretreatment value ($p=0.03$); however, this was not translated into a significant difference between both groups

Conclusion : *Early rehabilitation provides good and rapid recovery of erectile function in patients managed by nerve-sparing radical cystoprostatectomy.*

LETROZOLE AS AN APPROPRIATE THERAPEUTIC MODALITY FOR INFERTILE WOMEN WITH ENDOMETRIAL HYPERPLASIA

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Abstract

Aim of the work: *To evaluate the impact of oral letrozole therapy for 3-months on infertile patients with pathologically confirmed endometrial hyperplasia (EH).*

Patients and Methods: *The study comprised 17 infertile patients with EH. All patients underwent full clinical examination, transvaginal ultrasonography (TVU) to determine endometrial thickness (ET) and estimation of serum E2 levels. All patients were prescribed letrozole 2.5 mg tablets once daily for 3 months and underwent endometrial biopsy at end of treatment. The study outcome was defined as regression of EH to histologically normal endometrium at end of treatment.*

Results: *At the end of the 3-months treatment period, all patients showed significant reduction of preliminary endometrial thickness and decrease of serum E2 levels. All cases with simple EH without atypia (n=10) showed good response with a mean regression rate of ET of 70.2%, while was 59.3% in cases of complex EH without atypia (n=5) and 53% in cases of complex EH with atypia (n=2). The overall pathological success rate was 88.2%; 100% in simple EH without atypia, 80% in complex EH without atypia and 50% in EH with atypia.*

Conclusion: *For EH without Atypia in infertile patients oral letrozole therapy for 3-months resulted in high regression rate of endometrium and high pathological success rate. However, further large scale studies with dosage modification are needed to determine its true efficacy in EH with atypia in infertile patients.*

DESCRIPTIVE STUDY OF THE RELATION OF PATERNAL & MATERNAL AGE AND INCIDENCE OF DOWN SYNDROME IN TRIPOLI LYBIA

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Abstract

This descriptive statistical analysis focuses on the influence of the advanced parental age and the incidence of Down syndrome as well as health status of the Down syndrome child. The study was done on randomly selected 350 Libyan families that delivered Down syndrome child living in Tripoli. Information we concern pertaining the paternal age at the time of conception, the Down syndrome child age and health status at time of questionnaire. The mean age of mother, father and Down syndrome child was (33.9, 40.18 & 9.46 years respectively). The percentage of the male affected with Down syndrome is higher than the female (58.47% & 41.43%) respectively. The finding revealed that the highest percentage of Down syndrome delivery at mother age (>35 years), it was 49.14%, the highest percent at father age (>40 years), it was 55.43%. With the combination of the effect of mother and father age the highest percent at the mother age (>35 years) and father age (>40 years) with 73.71 %. These results Consider the role of paternal age in increasing incidence of Down syndrome would provide new sight into causal factors behind genetic diseases. Awareness of late reproduction, the risk of an affected pregnancy will remain but could substantially reduce.

ENDOCRINE DISORDERS IN PATIENTS WITH SICKLE CELL ANEMIA

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Abstract

Background: Red blood cell transfusions are a therapeutic mainstay in Sickle Cell Disease (SCD) and repeated transfusions can result in iron overload. Endocrine dysfunction is the most common and earliest organ toxicity seen in subjects with chronic iron-induced cellular oxidative damage. The aim of the present work is to investigate some of the endocrine functional disorders in patients with SCD.

Methods: The present study consisted of 30 patients with SCD recruited from the Medical Department of King Fahd Hospital- Hofuf, Eastern Province - Saudi Arabia. Most of the patients had a history of repeated blood transfusions (5 times/year). Patients were classified into two groups Group 1 (15 males) and Group 2 (15 females) with mean age for both sex (28.6 ± 5.4 years). Thirty age and sex matched normal subjects were, also, included in the study as a control group. Plasma level of testosterone, iron profile, FSH and LH as well as thyroid function tests were assessed.

Results: A total of 30 patients with SCD were recruited in the study (15 males and 15 females) with mean age 28.6 ± 5.4 years. They were compared to a control group of 30 healthy subjects and showed significant difference between group1 and the control group regarding the level of testosterone (5.03 ± 3.37 vs 9.65 ± 1.69 ; respectively, $p=0.05$). Also the level of testosterone showed insignificant correlation with the serum iron level among group1 ($r=-0.18$, $p=0.5$). A significant lower level in T4 was detected in group1 compared to the control group (5.17 ± 3.41 vs 11.01 ± 1.44 ; respectively , $p=0.001$) There was insignificant correlation

between testosterone level in group1 and the T4 level in the same group ($r=-0.01$, $p=0.89$). On the other hand, no significant difference was detected between group1 and control group as regard TSH level ($p=0.7$).

Female patients with SCD (group2) have a significant lower level of LH than the control group (8.7 ± 5.44 vs 16.2 ± 2.74 ; respectively, $p=0.001$). The present study revealed that there was no significant difference between the level of FSH among group 2 and the control group (6.19 ± 3.60 vs 6.4 ± 1.3 ; respectively, $p=0.8$). As regard the correlation between the LH level and the serum iron among group 2, there was no significant correlation ($r= -0.35$, $p =0.18$). Also group2 showed significant lower level of the T4 than the control group (6.58 ± 6.3 vs 11.64 ± 1.05 ; respectively , $p= 0.005$). On the other hand no significant correlation was found between patients and control group as regard TSH level ($p=0.1$).

There was no significant correlation between the level of T4 and the serum iron level in both group 1 and group 2.

Conclusion: The present study has demonstrated that SCD has a depressant effect on the hormone LH in female patients with SCD and T4 in both males and females with SCD irrespective of the serum iron level.