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# **BENHA MEDICAL JOURNAL**

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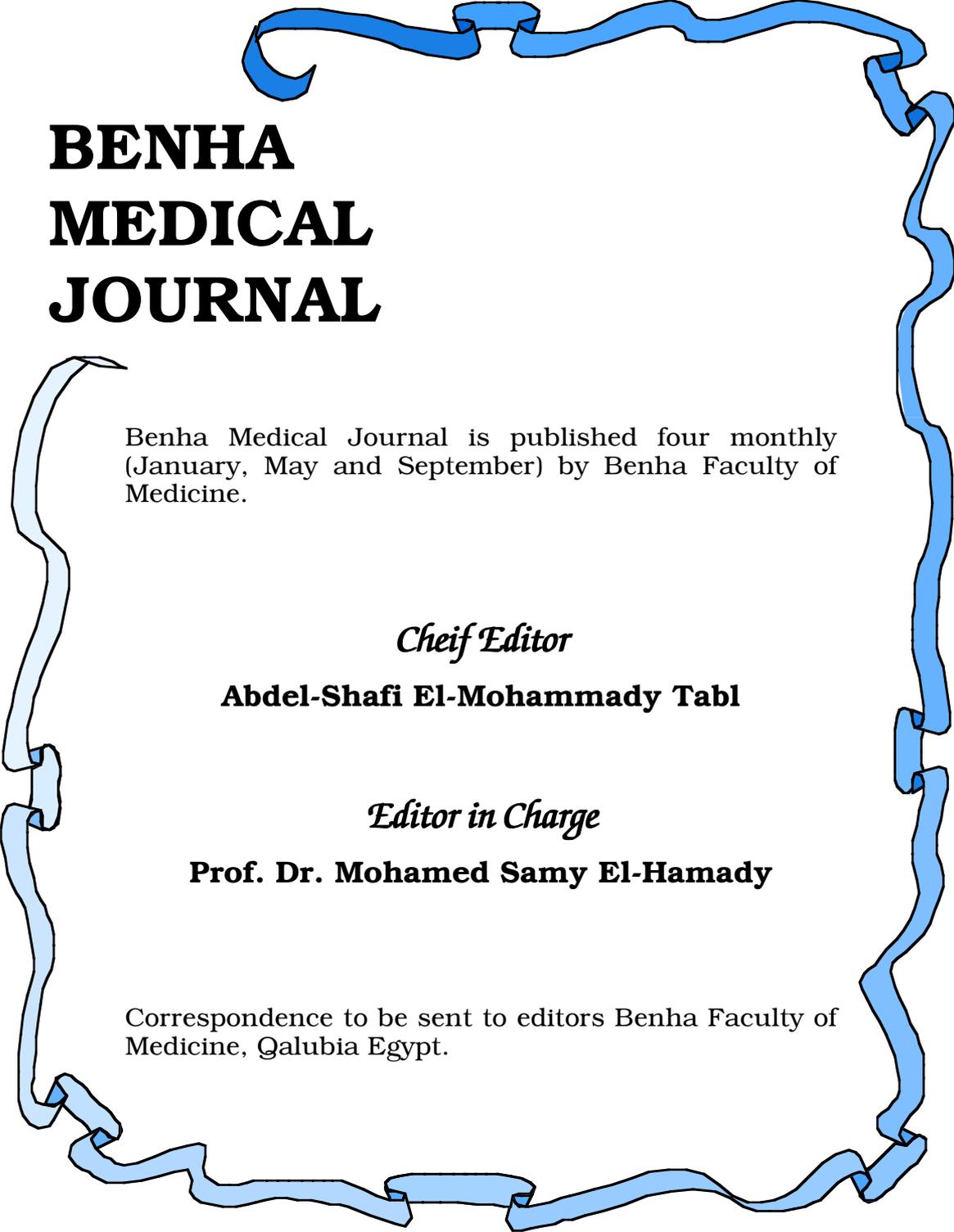
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# **BENHA MEDICAL JOURNAL**

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## COLANGIOCARCINOMA; A MAJOR THERAPEUTIC CHALLENGE

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### **Abstract**

**Background and aim:** Cholangiocarcinoma represent a major therapeutic challenge because of different histologies, tumor location and difficult surgical approach. The aim of this work was to evaluate the long-term outcome after surgical resection of bile duct cancer. An effort was also made to determine factors affecting survival. **Methodology:** This study was conducted at the Gastroenterology Center, Mansoura University in the period between January 2001 and December 2006. The study group included 60 patients with cholangiocarcinoma subjected to surgery. These patients were classified according to the site of origin of the tumor into 2 groups; group (A) hilar cholangiocarcinoma (28 patients); and group (B) distal cholangiocarcinoma (32 patients). In group (A), 20 patients (71.5%) had surgical resection done with added hepatectomy when the tumor was found extended to the corresponding branch either right or left. Eight patients (28.5%) were found advanced at the time of exploration. In group (B), 30 patients (93.8%) underwent pancreaticoduodenectomy, 1 palliative bypass and the last one no surgical intervention due to advanced disease. All patients were followed closely at 1 month, 6 months, one year and every year. Data regarding quality of life, survival, mortality and recurrence were thoroughly collected, evaluated and analyzed. **Results:** This study included 60 patients with cholangiocarcinoma, 41 males (68.4%) and 19 females (31.6%) with mean age of  $50.3 \pm 12$  years (range 23-76 years). Jaundice was the main presenting symptom in all patients, whereas pain was encountered in 38 patients (63.4%). Microscopic examination of the resected surgical specimens revealed the presence of adenocarcinoma in 47 patients (94%), squamous cell carcinoma in 2 (4%) and high grade dysplasia in one patient (2%). Postoperative biliary leakage oc-

occurred in 6 patients (12%), abdominal collection in 4 (8%) and bleeding in 4 patients (8%), from the gastrojejunal anastomotic site in 2, pancreatic stump in 1 and from the operative field in the last one. Hospital mortality occurred in 5 patients (10%), 4 due to liver cell failure and one due to cardiopulmonary factor. Late mortality occurred in 20 patients (40% of the surgically treated group), 13 (26%) due to disease recurrence, 5 (10%) due to liver cell failure and 2 patients (4%) missed follow up but reported by their relatives. Disease recurrence occurred in 13 patients (26%), this was in the form of local recurrence in 7 patients (14%) and liver metastasis in 6 (12%). In this study, 50 patients were surgically treated and followed for 2-25 months (mean  $14 \pm 9.2$  months). Actuarial 6, 12, 18 and 24 months survival rates were 92.1%, 63.2%, 36.8% and 13.2% respectively.

**Conclusion:** Radical resection for cholangiocarcinoma provides the best survival rates, moreover, preoperative biliary drainage to decrease jaundice together with a curative resection and adequate safety margins are recommended if longer survival is to be anticipated.

**A LIGHT AND ELECTRON MICROSCOPE  
STUDY OF THE EFFECT OF SILDENAFIL  
CITRATE ON THE KIDNEY OF  
CYCLOSPORINE-TREATED ALBINO RATS**

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**Abstract**

*The goal of the current study was to clarify the effects of the phosphodiesterase-5 inhibitor, sildenafil citrate (SC), on the kidney of cyclosporine A (CsA)-treated albino rats. Thirty adult male albino rats (200-250 gm) were used in the present investigation. They were allocated into three equal groups: control, CsA- treated and both CsA and SC- treated. The animals were sacrificed after three weeks and blood samples were withdrawn by direct cardiac puncture to determine the levels of urea and creatinine in plasma. Also, small slices of the kidney were processed for histological, histochemical and immuno-histochemical study. The CsA-treated rats showed a significant increase in both blood urea nitrogen and plasma creatinine. Then, followed a significant decrease in their values in the CsA and SC- treated animals. Histological examination of the kidney of the CsA- treated group exhibited a degeneration in both the tubular epithelium and the glomerulus with a relative widening of the sub-capsular spaces. Areas of interstitial haemorrhage and cellular infiltration were encountered. There was a relative increase in the amount of interstitial fibrosis. Ultrastructurally, the minor foot processes of the podocytes were enlarged and fused around an apparently thickened basement membrane with an apparent reduction in the number of filtration slits. The cells of proximal convoluted tubules showed a marked reduction in their basal infoldings. The nucleus became irregular in outline and the cytoplasm housed degenerated mitochondria. Succinic dehydrogenase reaction got weak while the acid phosphatase one became strong. A moderate to strong immune reaction to caspase- 3 was detected in the renal tubules. On the other hand, albino rats receiving both CsA and SC showed an improvement in the histological architecture and in both the histochem-*

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*ical and immunohistochemical reactions. In conclusion, the present findings lend support to a lessening role of the phosphodiesterase-5 inhibitor, SC, on the CsA- induced renal effects.*

## **THE POTENTIAL THERAPEUTIC EFFECT OF MELATONIN IN REFLUX ESOPHAGITIS**

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### **Abstract**

**Background:** Melatonin is synthesized not only in the pineal gland, but also in different organs, the special attention has been directed to the digestive tract where total quantity of melatonin is considerably greater than in the pineal gland. Many drugs were used for the treatment of reflux esophagitis such as omeprazole ( a proton pump inhibitor ) which is widely used antiulcer drug and has been demonstrated to protect against esophageal mucosal injury.

**Aim of work:** The aim of this study is to evaluate the role of exogenous melatonin in the treatment of reflux esophagitis in human either alone and in combination with omeprazole therapy .

**Subjects & methods:** 36 persons were divided into 4 groups ( control, patients with reflux esophagitis treated by melatonin for 4 , 6 and 8 weeks, patients with reflux esophagitis treated with omeprazole for same periods , and patients with reflux esophagitis treated with combination of melatonin and omeprazole for same periods ). Each group consisted of 9 persons .Persons were subjected to thorough history taking, clinical examination , investigations ( laboratory , endoscopic , record of esophageal motility, pH-metry)

**Results:** Melatonin has a role in improvement of Gastro-esophageal reflux disease(GERD) either used alone or in combination with omeprazole. Meanwhile, omeprazole ( a proton pump inhibitor) alone is better used in treatment of GERD than melatonin alone.

**Conclusion :** The present study showed that oral melatonin is a promising therapeutic agent for the treatment of GERD. It is an effective line of treatment in relieving epigastric pain and heart burn. However, further studies are required to confirm the efficacy and long-term safety of melatonin before it can be recommended for routine clinical use.

## **MECHANISM OF FOOD ADDITIVE (MONOSODIUM GLUTAMATE)- INDUCED OBESITY A MOLECULAR STUDY**

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### **Abstract**

**Background:** *There is no question that there is an obesity epidemic in our country, as well as in some other countries. Obesity during pregnancy increases maternal and fetal morbidity and is a risk factor for gestational diabetes and hypertensive disorders of pregnancy. There are many causes of obesity from them the bad use of food additives, the monosodium glutamate is considered one of the most popular food additives.*

**Aim of work:** *The results of previous studies on the role of monosodium glutamate in developing of obesity are controversial so the aim of this paper is to determine the role of MSG in developing obesity through studying its effect on Ob gene expression and leptin receptor-b gene expression and to determine its effect on some cardiac disease indicators as apo-A<sub>1</sub> and apo-B.*

**Materials and Methods:** *We used in this study 60 pregnant female rats which were divided into 2 groups, control group and group supplemented with monosodium glutamate. In all rats, determination of biochemical parameters as serum glucose, insulin, leptin, total lipids, cholesterol, HDL, LDL, VLDL, apo A1, apo B, as well as determination of ob and leptin receptor-b gene expression were done.*

**Results:** *Our results indicated that the administration of monosodium glutamate is accompanied with increase of Ob gene expression, leptin, insulin, lipoprotein B, lipogram, glucose and decrease of brain leptin receptor-b gene expression, lipoprotein lipase activity and HDL concentrations.*

**Conclusion:** *It can be concluded that the administration of MSG may be considered as one of the main causes of obesity by increasing of leptin and insulin resistance and so developing of hyperphagia. Also it is accompanied by increasing the risk of atherosclerosis through development of diabetes mellitus type II and increasing total cholesterol and LDL. Moreover, maternal obesity is a serious condition that significantly impacts health of mothers and their children.*

**Key words:** *Obesity , monosodium glutamate , pregnancy.*

## **PROGNOSTIC IMPACT OF LYMPHOVASCULAR INVASION AMONG NODE NEGATIVE BLADDER CANCER**

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### **Abstract**

**Purpose :** *we studied the prognostic significance of lymphovascular invasion (LVI) among cases with node negative bladder cancer treated by radical cystectomy and lymphadenectomy.*

**Material and Methods :** *A retrospective study on 1186 patients treated by one stage radical cystectomy and lymphadenectomy done between 1980 and 1995 in urology and nephrology center, Mansoura university and with negative lymph node on histopathological examination. We study the correlation between LVI and different tumour criteria. Additionally, we studied the impact of such variable of the patient survival in univariate and multivariate manner.*

**Results:** *Follow up period ranged from 0-17.3 years. The incidence of LVI among cases with negative node was 14.6% versus 40.9% among cases with positive nodes ( $P < 0.001$ ). There is highly significant correlation between LVI and tumour histology, stage, grade and DNA ploidy. No significant correlation between LVI and Bilharziasis. The overall 5-year disease free survival was 66.7%. The 5-year disease free survival among cases without LVI was 63.7% versus 49.2% for cases with LVI ( $P = 0.004$ ). Pathologic tumour stage, grade, histology, DNA ploidy all had significant impact on the patient survival by univariate analysis. By multivariate analysis, only the tumour stage and grade sustain their independent impact while the LVI, tumour histology and DNA ploidy did not sustain such independent significance*

**Conclusion :** *In node negative bladder cancer, only tumour stage and grade had independent prognostic impact on the patient survival. LVI, inspite of having significant impact on univariate analysis, did not sustain their significance on multivariate analysis.*

## **EVALUATION OF TINNITUS PATIENTS WITH NORMAL HEARING SENSITIVITY USING TEOAEs AND TEN TEST**

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### **Abstract**

*Subjective tinnitus may be associated with hearing loss or occurs in normal peripheral hearing patients. It is a complex phenomenon that has many causes and is related to biological and psychological components. Considerable efforts have been devoted to find methods that can describe the psychoacoustical properties of tinnitus. Otoacoustic emissions (OAEs), are low level sounds emitted by the healthy outer hair cells (OHCs) of the cochlea. It is used to delineate some mechanisms in cochlear functioning that might accompany tinnitus by evaluating the condition of OHCs. The threshold equalizing noise test (TEN test) recently developed by Moore in 2000 is a screening diagnostic tool that helps in detecting the presence of dead regions in the cochlea by using noise. Thus might clarify the possibility of inner hair cell damage in such patients. Accordingly, this study was designed to investigate the possibility of underlying cochlear damage whether OHCs or IHCs in tinnitus suffering patients with normal hearing sensitivity, using TEOAEs and TEN test, if any. Twenty patients suffering from unilateral tinnitus with normal hearing sensitivity participated in this study. Their other ear acted as control ears. They were subjected to full history taking, otoscopy, basic audiological evaluation, TEOAEs and TEN test. TEOAEs were abnormal in 85% of the tinnitus ears compared to 20% in control ears, this difference was statistically significant. The abnormal TEOAEs frequency bands in the tinnitus ears were statistically significant above 2000 Hz when compared to the control ears and were more common for the 4000Hz and 5000 Hz. This suggests that OHCs dysfunction may be important in the generation of tinnitus. TEN test demonstrated dead regions in the cochlea in 15% of the tinnitus ears*

*only. This might be attributed to increased resistance of IHCs to damage compared to OHCs vulnerability. The affected frequency location was at 500 Hz in 5 %, 3000 and 4000 Hz in 10% of tinnitus ears. In conclusion, this work has shown a higher prevalence of OAE abnormalities in tinnitus patients with normal hearing in contrast to TEN test denoting the more vulnerability of OHCs to damage.*

**VALUE OF ELECTROCARDIOGRAPHY IN  
LOCALIZATION OF THE OCCLUSION SITE IN  
LEFT ANTERIOR DESCENDING CORONARY  
ARTERY IN ACUTE ANTERIOR  
MYOCARDIAL INFARCTION**

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**Abstract**

**Objective :** *this study was conducted to evaluate the electrocardiographic localization of the occlusion site in left anterior descending coronary artery in acute anterior myocardial infarction.*

**Patients and methods:** *this study involved 50 patients presenting with acute anterior myocardial infarction with st segment elevation >2mm in two consecutive leads (v1-v3). All patients underwent thorough history taking, full clinical examination, laboratory work up involving cardiac markers, serial ECGs and coronary angiography within 8 days. ECG changes were correlated with the angiographic site of LAD occlusion whether proximal to 1<sup>st</sup> diagonal or distal to 1st diagonal.*

**Results:** *the culprit lesion was proximal to 1st diagonal in 27(54%) patients , distal to 1<sup>st</sup> diagonal in 21(42%) patients , and both proximal and distal to 1<sup>st</sup> diagonal in 2 patients who were excluded from the study. ECG predictors of LAD occlusion proximal to D1 were ST elevation in avr, ST depression in inferior leads, ST depression in V5, ST elevation in V1 >2.5mm . While ECG predictors of LAD occlusion distal to D1 were absence of ST depression in inferior leads. ST depression avl , Q in V4-V5 .*

**Conclusion:** *In acute anterior myocardial infarction electrocardiogram is useful to predict the left anterior descending occlusion site.*

## **EFFECT OF NEAR-TOTAL THYROIDECTOMY ON THYROID ORBITOPATHY DUE TO TOXIC GOITER**

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### **Abstract**

**Background:** *The relative merit of operation in the treatment of Graves' ophthalmopathy as well as the extent of surgical resection is still a matter of debate. This work aimed at reporting the assessment of the impact of near-total thyroidectomy on the course of ophthalmopathy including exophthalmos.*

**Methods:** *A total of 20 patients, with thyrotoxic goiters suffering from mild to moderate exophthalmos were enrolled onto this prospective study. Preoperative evaluation of ophthalmopathy was accomplished through the NOSPECS classification, MRI scanning for measuring the extraocular muscle diameters and measurement of the exophthalmos using Hertel's exophthalmometer. Six months postoperatively, ophthalmopathy including exophthalmos was re-evaluated using the same parameters mentioned before.*

**Results:** *Clinical activity evaluation, exophthalmometry and extraocular muscles measurement by MRI revealed that the majority of the cases experienced improvement of their ophthalmopathy (65%). This improvement was statistically significant. In addition, no major postoperative complications were observed. However, the study, unlike a number of reported retrospective ones, failed to specify any statistically significant prognostic factors affecting the course of ophthalmopathy possibly due to the limited number of cases in general. In addition, all of the cases were of relatively young age and thyrotoxic, and the majority were females and non-smoking.*

**Conclusion:** *Beside the fact that near-total thyroidectomy adds the advantages of total thyroidectomy (no recurrence) to those of subtotal thyroidectomy (low incidence of temporary and permanent hypoparathyroidism), it has a significant positive impact on thyroid-associated orbitopathy.*

**TOTAL THYROIDECTOMY IN TREATMENT  
OF NON-MALIGNANT GOITER :  
IS IT WORTHWHILE ?**

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**Abstract**

*Total thyroidectomy is increasingly being accepted as a treatment of choice for differentiated thyroid cancer. However, because of presumed increased morbidity associated with this procedure, it is still not considered a viable option for management of benign thyroid disorders. To assess the safety and efficacy of total thyroidectomy for management of benign thyroid disorders, we analyzed our data from 100 total thyroidectomies performed for benign thyroid disorders. Demographic details, biochemical findings, indications for operation, specimen weight, and complications were noted. Among these patients, 35 had a toxic goiter and 65 had a non toxic goiter. The mean duration of goiters was  $3.8 \pm 3.06$  years (3 - 8 years), and the mean weight of the specimens was  $85 \text{ gm} \pm 180 \text{ gm}$ . The incidence of permanent hypothyroidism and permanent recurrent laryngeal nerve palsy were 1% in both. According to this study, we can conclude that: total thyroidectomy should be considered as the treatment of choice for multinodular goiter and Graves' disease in a setting of palpable nodule(s) or ophthalmopathy (or both) because reoperation for recurrent goiter in such a setting would be hazardous with distressing complications.*

## **LAPAROSCOPY-ASSISTED TRUNCAL VAGOTOMY WITH ANTECOLIC ANTERIOR GASTROJEJUNOSTOMY FOR CICATRICAL PYLORIC STENOSIS**

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### **Abstract**

**Background :** Duodenal ulcer is a common disease in Egypt. The management of this disease has changed dramatically. Surgery is still indicated for the complications of duodenal ulcer .Pyloric stenosis is a common complication that may result from reluctance of the ulcer patient to seek medical advice or to receive adequate treatment . From 1992 to 2006, 175 patients with cicatricial pyloric stenosis were operated on (open truncal vagotomy with gastrojejunostomy) in our center . The aim of this work is to declare the role of minimally invasive surgery in the form of laparoscopic truncal vagotomy and extracorporeal gastrojejunostomy for treatment of cicatricial pyloric stenosis .

**Methods :** From December 2006 to December 2007, 14 cases of cicatricial pyloric stenosis underwent laparoscopic truncal vagotomy and extracorporeal antecolic gastrojejunostomy through a small 4 cm transverse incision in the left hypochondrium .

**Results :** The advantages of this procedure include reduction of pain, size of the wound and incidence of incisional hernia. The results are comparable to those of a totally laparoscopic truncal vagotomy and gastrojejunostomy .

**Discussion :** Cicatricial pyloric stenosis is an absolute indication for surgery . The standard surgical approach is truncal vagotomy and gastrojejunostomy . It could be performed totally laparoscopic using either endosteplers or intracorporeal suturing . Laparoscopy- assisted truncal vagotomy with gastrojejunostomy achieves the advantages of minimally invasive surgery , easy anastomosis and is cost effective.

**Conclusion :** *This procedure is relatively easy to perform as the anastomosis is done extracorporeally . It is less expensive than the use of endostaplers. It achieves the advantages of minimally invasive surgery in a cheap manner. This is very suitable for developing countries like Egypt.*

## **LAPAROSCOPIC SUTURE GASTROPEXY FOR CHRONIC GASTRIC VOLVULUS**

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### **Abstract**

**Background:** Gastric volvulus is a rare condition, however it may result in serious complications. It occurs mainly as a result of congenital laxity of the stomach's attachments and might be accompanied by a diaphragmatic hernia. A patient may have acute or chronic disease. We present 6 patients of chronic gastric volvulus who were managed with laparoscopic suture gastropexy.

**Methods:** We managed 6 patients with chronic gastric volvulus during the past 4 years. All of them had primary and organo-axial type of volvulus. All of them were proved by barium meal study and underwent elective surgery in the form of laparoscopic posterior suture gastropexy.

**Results:** All patients recovered well from surgery. The postoperative pain was minimal with early ambulation. The average hospital stay was 3 days. There was neither morbidity nor mortality. Follow up with barium meal studies gave good results in all cases.

**Discussion:** Diagnosis of chronic gastric volvulus needs a high index of suspicion. This is because of its rarity and its similarity with other more common diseases as cholelithiasis and peptic ulcer. Confirmation of diagnosis requires barium meal study. It could be managed either by open surgery, by laparoscopic/ endoscopic approach or by laparoscopic approach alone. Laparoscopic suture gastropexy gives good results.

**Conclusion:** Eventhough worldwide experience in laparoscopic surgery for gastric volvulus is limited, the results are encouraging. Laparoscopic management seems to be safe and feasible.

## **ASSOCIATION BETWEEN THYROID DYSFUNCTION AND CHRONIC HEPATITIS C GENOTYPE 4 VIRUS INFECTION AND EFFECT OF INTERFERON THERAPY ON IT**

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Biochemistry, Damietta Faculty of Science\*& Public Health\*\*,  
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### **Abstract**

**Background:** Autoimmune thyroid dysfunction, a cluster of conditions in which the immune system can either attack or stimulate thyroid tissue, has been associated with HCV infection. Autoimmune thyroid disease can take various forms, from the symptoms of hypothyroidism to the palpable goiters. Therefore, this work aimed to estimate the prevalence of thyroid dysfunction in HCV genotype 4 Egyptian patients and assess the effect of interferon therapy on it. Also to study the association between thyroid disorders, TNF- $\alpha$  and liver function parameters among HCV infected patients. **Methods:** A case control study was conducted on 253 HCV genotype 4 patients selected randomly, attended to National Liver Institute, Monufiya University, The patients were divided into two groups. 220 chronic HCV patients not treated with any anti-viral therapy. 33 chronic HCV patients, treated with pegylated interferon (Peg-IFN) combined with ribavirin for 12 months. For both groups of patients, PCR test were done. Also liver biopsy was performed before treatment to assess hepatic fibrosis using histological hepatic activity index (HAI) of Knodell et al, and modification of Ishak et al. In addition to 19 healthy individuals without any thyroid dysfunction or liver diseases used as control group. Levels of thyroid-stimulating hormone (TSH), total thyroxine (T4), triiodothyronine (T3) and tumor necrosis factor alpha, also all liver function tests were measured. **Results:** the overall prevalence of thyroid disorders among non treated group was 13.6 percent (30 cases), 63.3

percent of them were females , 13 (5.9 percent) were hyperthyroidism , 8 (61.5 percent) of them were females, and 17 (7.7 percent) were hypothyroidism , 11 (64.7 percent) of them were females. While the prevalence among HCV treated patients were 15.1 percent (5 cases), all of them had hypothyroid function only , 4 (80 percent) of them were females .The serum tumor necrosis factor alpha (TNF- $\alpha$ ) levels significantly increased in HCV infected non treated patients when compared with control group ( $p < 0.001$ ) , and in treated patients when compared with non-treated group ( $p < 0.001$ ). TNF- $\alpha$  level showed significant positive correlation with thyroid stimulating hormone (TSH) in HCV treated group and significant negative correlation with albumin and aspartate transaminase (AST) in the HCV non-treated group. **Conclusion and Recommendations** : HCV infection are associated with thyroid dysfunction especially after interferon and ribavirin treatment. TNF- $\alpha$  may play a role in inducing autoimmune thyroid disorders. This implies that these patients should be screened for thyroid function on a periodic basis especially interferon treated cases .

## **ASSESSMENT OF RHOMBOID FLAP TECHNIQUE AS COMPARED WITH MIDLINE CLOSURE FOR THE MANAGEMENT OF CHRONIC PILONIDAL SINUS**

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### **Abstract**

**Objectives:** *Different procedures have been advocated for the management of chronic pilonidal sinus (PNS), none of which is perfect. This study was conducted to compare between the Limberg flap technique and conventional midline closure in patients with chronic PNS.*

**Incidence:** *The onset of PNS is rare both before puberty and after the age of 40. Males are affected more frequently than females, probably due to their more hirsute nature [Sondenaa et al. (1995)]. In a population study of 50,000 students, the incidence in males was 1.1%, ten times more than in females [Dwight and Maloy (1953)], although many of these were asymptomatic*

**Methods:** *This study included 20 patients with chronic pilonidal sinus admitted to the department of surgery between Feb 2005 and June 2006. Good history as regarding, duration, number of sinuses and their location, previous management, operative technique and time, hospital stay, return to normal activity, morbidity, and recurrence of disease. Patients were categorized into 2 groups. Patients in-group 1 (n = 10) were treated with the rhomboid flap, whereas those in-group 2 (n = 10) were treated with the standard midline closure technique, with a follow up period ranging from 12m -18 months.*

**Results:** *Twenty patients underwent with this technique, mean age 23.4 years (range 18 to 34). Mean follow-up was 13 months. The mean time of patients discharge was 3 days (range, 2-5 days) postoperative. Complication was noticed more with midline closure (3 of 10 [30%]) as*

compared with rhomboid flap technique (1 of 10[10%]). Recurrence was observed in 2 cases (20%) with midline closure while no recurrence was observed with patients treated with rhomboid flap technique.

**Conclusions:** Rhomboid flap is recommended for patients with chronic PNS as it is a simple, nonlengthy procedure that has less overall complications and a lower recurrence rate than the conventional midline closure method.

**Background:** Chronic pilonidal sinus (PNS) is a common disabling disorder among young adults. It has a high and rising incidence in some countries, particularly so in the Mediterranean and Gulf region as a result of differing hair characteristics and growth patterns[Aldean et al.(2005)] ,[Sakr et al.(2006) ].

The treatment of the symptomatic pilonidal sinus is surgical with one of the most extensive being excision of the diseased tissue down to the sacral fascia. The closure of the defect is the matter of debate. An operation that results in reliable primary wound healing and few complication and recurrence, a short period of hospitalization, minimal postoperative pain and morbidity, rapid return to normal daily activity, and low risk of recurrence are seen as requirements to optimal therapy[Berry (1992)], [Karydakakis (1992)].

This study compare the result of rhomboid flap technique and the midline closure for the management of chronic pilonidal sinus as regard duration of wound healing ,home stay , complication and recurrence of the disease [Katsoulis et al. (2006)].

## VASCULAR THORACIC OUTLET COMPRESSION SYNDROME

**Samir M. Atia MD, Khalid A. Mowafy MD,  
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Mansoura University Hospital, Egypt*

### **Abstract**

**Objective:** *The aim of this study was to describe our experience with the surgical treatment of arterial and venous thoracic outlet syndrome.*  
**Patients and Methods:** *This prospective study included 25 patients with vascular compression at thoracic outlet area. They were admitted to Vascular Surgery Unit, Mansoura University Hospital during the period from July 2004 to July 2007. patients were classified into two main groups. Group I (arterial thoracic outlet syndrome, n = 16). Group II (venous thoracic outlet syndrome, n = 9).*  
**Results:** *The operations of arterial reconstruction were worthwhile for all patients with excellent results in 11 patients (84.6%), only 2 patients (15.4%) developed early postoperative thrombosis which was managed by transbrachial thrombectomy. The success rate of surgical interference for venous non-thrombotic patients was 100% while conservative treatment of thrombotic patients showed success in 4 patients (57%) and failure in 3 patients (43%).*  
**Conclusion:** *In patients with vascular compression, resection of the first rib, resection of cervical rib, scalenectomy and neurolysis of the brachial plexus are recommended in addition to vascular reconstruction. Our experiences using the supraclavicular approach indicate that this is a safe route with good results and minimal risk to the patients health.*

## **HORMONE REPLACEMENT THERAPY AND RISK OF BREAST CANCER**

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Yaser Abdel Dayem MD, Adel Helal MD  
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Clinical Oncology and Nuclear Medicine\*\*, Mansoura University Hospital, Egypt*

### **Abstract**

**Objective:** To determine the effect of different types and formulations of hormone replacement therapy (HRT) on the risk of breast cancer in postmenopausal women at Mansoura University Hospitals. **Patients and Methods:** This study was conducted in Obstetrics and Gynaecology, General Surgery and Oncology and Nuclear Medicine Departments, Faculty of Medicine, Mansoura University from January 2005 to June 2008. The study group included 210 cases of postmenopausal women ranging in age from 50-70 years with breast cancer for whom surgical interventions were done according to the stage. The study group were matched with 400 cases representing control group. **Results:** The rate of breast cancer was increased with the use of opposed estrogens in oral form (adjusted relative risk "RR" 1.1; 95% confidence interval "CI" 1.31-1.42) and injectable (RR 1.1; 95% CI 0.86-1.20). The rate of breast cancer was not increased among users of unopposed estrogens (RR 0.96; 95% CI 0.86-1.09) or of progestins only (RR 0.86; 95% CI 0.85-1.12). **Conclusion:** Oral estrogen-progestin combinations appear to be associated with an increased breast cancer risk while estrogens alone and progestins are not.

**Key works:** HRT, breast cancer, postmenopausal women.

## **CAROTID ARTERY INTIMA-MEDIA THICKNESS AND ENDOTHELIAL FUNCTION IN PATIENTS WITH NONALCOHOLIC FATTY LIVER DISEASE**

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### **Abstract**

**Background:** Nonalcoholic fatty liver disease (NAFLD) is an increasingly recognized cause of liver related morbidity and mortality. Recently, there is increasing evidence of its association with atherosclerotic risk factors and potential cardiovascular risk. The aim of the present study was to evaluate carotid artery intima-media thickness (IMT) and endothelial function as markers of preclinical atherosclerosis in patients with NAFLD. **Methods:** The present study included 24 patients with ultrasound diagnosed NAFLD (14 men and 10 women, mean age  $47.4 \pm 6.7$  years) and 20 age and sex matched control subjects. Patients and control groups were evaluated for metabolic syndrome (Met S) according to Adult Treatment Panel III, insulin resistance index (HOMA-IR), high sensitivity C-reactive protein (Hs-CRP) carotid artery IMT and brachial artery flow mediated dilatation in response to ischemia (FMD) and nitroglycerine induced dilatation (NID). **Results:** Visceral obesity, hypertriglyceridemia were more frequent ( $P=0.03$  &  $0.01$  respectively) with 3 fold increase in the frequency of Met S (33% vs 10%) in NAFLD patients as compared to controls. NAFLD group had increased mean IMT ( $0.713 \pm 0.181$  vs  $0.593 \pm 0.125$ ,  $P=0.017$ ), increased plaque frequency (37.5% vs 10%,  $P=0.03$ ), and lower FMD and NID ( $5.67 \pm 2.07\%$  vs  $7.78 \pm 2.42\%$ ,  $P=0.003$  &  $8.42 \pm 2.71\%$  vs  $10.31 \pm 2.53\%$ ,  $P=0.022$ , respectively) as compared to control group. In NAFLD group, IMT correlated significantly with BMI, TG, HOMA-IR ( $P<0.0001$ ), waist circumference, SBP and Hs-CRP ( $P=0.002$ ,  $0.038$  &  $0.009$  respectively), percent FMD correlated significantly with

*BMI, waist circumference, HOMA-IR, TG and Hs-CRP (P=0.011, 0.003, 0.01, 0.001 & 0.02 respectively). Conclusion: NAFLD is associated with increased carotid IMT and endothelial dysfunction which are related to the frequent metabolic syndrome features and point to accelerated atherosclerosis. Screening of NAFLD patients with metabolic syndrome features together with the use of non-invasive measures for assessment of preclinical atherosclerosis, could help in early risk assessment and guide for proper life style and therapeutic measures aiming at vascular risk reduction.*

**BROTHERS OF WOMEN WITH  
POLYCYSTIC OVARY SYNDROME :  
A NEW GROUP WITH HIGH RISK FOR  
TYPE 2 DIABETES MELLITUS AND  
CARDIOVASCULAR DISEASE**

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**Abstract**

*Aims and Hypothesis: Polycystic ovary syndrome (PCOS) is common endocrinal disorder which is highly inherited and characterized by many metabolic abnormalities. We hypothesized that male relatives of PCOS women would also have metabolic abnormalities. Thus, our aim was to assess insulin sensitivity and metabolic parameters in brothers of women with PCOS and male control individuals. Subjects and Methods: 30 brothers of women with PCOS and 20 male healthy control subjects were included in the study. Brothers and control were subjected to complete medical evaluation with stress on anthropometric measurements, fasting insulin, homeostasis assessment model (HOMA-IR), lipids, plasminogen activator inhibitor-1 (PAI-1), C-reactive protein (CRP) and androgens. Results: Brothers and control individuals were similar as regard to age, BMI, WHR and blood pressure. However, brothers were insulin resistant and had dyslipidemia and dyscoagulability (HOMA-IR,  $P=0.043$ , TC  $P=0.001$ , LDL-C  $P=0.002$ , HDL-C  $P=0.03$ , TG  $P=0.048$ , PAI-1  $P=0.002$ , CRP  $P=0.046$ ). Also HOMA-IR, was correlated significantly with BMI  $P<0.001$ , WHR  $P<0.001$ , PAI-1  $P<0.001$ , CRP  $P<0.01$ , TG,  $P<0.001$ , LDL-C  $P=0.02$ , HDL-C  $P=0.019$ ). Conclusion: Brothers of women with PCOS have a metabolic phenotype consisting of dyslipidemia, insulin resistance, dyscoagulability and carry an increased risk of cardiovascular disease (CVD) and type 2 diabetes mellitus (type 2 DM). Given the high prevalence of*

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*PCOS, brothers may represent an important new risk factor for CVD in men and should be considered a well identified group for primary preventive measures.*

## ASSESSMENT OF FUNCTIONAL FEEDING AND SWALLOWING BIOMECHANICS IN NORMAL CHILDREN\*

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### **Abstract**

**Introduction:** *There has been little research on functional feeding and swallowing pathophysiology in children. Furthermore, the parameters that define adults swallowing can not always be applied to the children because of differences in the relationships of anatomic structures and lack of neurological maturation. **Objectives:** The aims of the study were to assess the functional feeding and swallowing biomechanics of normal children in order to understand when feeding and swallowing vary or deviate and also to provide a frame of reference for creating therapeutic programs for the children with impaired deglutition. **Subjects and methods:** This study was conducted on 10 normal children (7 females and 3 males) with their ages ranged between 3.2-10.3 (mean  $6.8 \pm 2.3$ ) years. All children were observed during eating using "The Pediatric Feeding Assessment checklist". The feeding domains assessed were spoon feeding, cup and straw drinking, biting, chewing, and drooling. Behaviors in each domain are rated as normal and abnormal. The swallowing function was then evaluated for all children using Videofluoroscopy. The child was asked to swallow different bolus consistencies (thin and thick liquids, semisolid and solid) in small and large volumes (3 and 5 ml). The selected swallowing observations and measures were: (1) Number of swallows per bolus in different consistencies and volumes. (2) Temporal measures of bolus and hyoid movements during swallowing; (3) Oro-pharyngeal residue; (4) Laryngeal penetration/aspiration observation and (5) Oro-pharyngeal Swallow Efficiency (OPSE) score. **Results:** All Children demonstrated a 100% competence on all feeding behaviors. Multiple swallows per bolus were observed as the bolus consistency increases especially*

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*with large volumes. Most of the children (60-90%) demonstrated oro-pharyngeal residue in both thick liquid and semisolid consistencies regardless the volume of the bolus. No laryngeal penetration and/or aspiration were observed in different bolus consistencies and volumes. All the temporal measures of swallowing demonstrated statistically significant increases as the bolus volume and/or consistency increase. Normal OPSE score was recorded for all children with different bolus consistencies and volumes. **Conclusion:** A normative data for the functional feeding and swallowing biomechanical parameters for normal children was presented. Further research is recommended to apply these data in children with oro-pharyngeal dysphagia due to different etiologies.*

**Key words:** *pediatric swallowing - feeding - videofluoroscopy - deglutition*

## **ASSESSMENT AND BEHAVIORAL MANAGEMENT OF DROOLING IN CHILDREN\***

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### **Abstract**

**Background:** Drooling is common in children with mental retardation and cerebral palsy and may even persist to adult life. Persistent drooling can cause physical morbidities and social embarrassment. **Objectives:** The aim of this prospective study was to develop a quasi-objective protocol for assessment of drooling in children in order to describe the clinical profile of children suffering from this problem, and to investigate the effectiveness of the behavioral management in reducing their drooling severity and frequency. **Patients and Methods:** The study group consisted of 12 children with their ages ranged between 5 and 10 (mean  $6.6 \pm 1.5$ ) years. All children were mentally retarded and eight of them had also brain damage motor handicapping (BDMH). The IQ for the children ranged between 45 and 69 (mean  $59.91 \pm 8.13$ ). All children had varying degrees of drooling problem. All the children were evaluated through a specially designed diagnostic protocol that included simple clinical quasi-objective tests to assess severity, frequency and the amount of drooling and drooling quotient. Reasons for drooling in these children included poor head/body control, constant open mouth posture, inadequate lip and tongue control and impaired lips and intra-oral sensation. Behavior Re-Adjustment Therapy (BRAT) was used to control drooling for all children. The Program consisted of head/body positioning and motor and sensory enhancement techniques. The patients were reassessed after 3 months period of treatment and 6 months follow-up to evaluate the effectiveness of the behavioral therapy. **Results:** Statistically significant improvements were found in all drooling parameters at the end of therapy with the maintenance of the newly acquired skills at the follow-up. **Conclusions:** The simple clinical quasi-objective tests used in this study to assess

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*drooling were well-tolerated by the children and reflected the beneficial outcome of BRAT to control drooling in children with mental retardation and/or BDMH. Also, active participation of the caregivers contributed to the maintenance of the newly acquired skills.*

**Key words:** *Drooling - Behavior Therapy - Mental Retardation - Cerebral Palsy - brain damage motor handicapped*

**IMPACT OF EVERSION TECHNIQUE IN  
CAROTID ENDARTERECTOMY :  
MANSOURA EXPERIENCE**

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and Yaser M. El-Keran MD**

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**Abstract**

**Purpose :** *To review our experience in eversion technique in carotid endarterectomy in patients with carotid artery stenosis with particular attention to restenosis, occlusion, recurrent stroke or TIA.*

**Methods :** *This prospective study included 12 patients with symptoms of unilateral carotid artery stenosis who were investigated, operated and followed up in Vascular Surgery Unit of Mansoura University Hospital during the period from July 2004 to January 2008. Eversion carotid endarterectomy (ECEA) was carried out for all patients.*

**Results :** *Carotid restenosis rate (>50%) during follow up was (0%) after eversion CEA at the end of the study. The cumulative stroke free survival rate was 85.7% at the end of the study.*

**Conclusion :** *ECEA is a feasible and safe alternative technique for management of extracranial carotid stenosis, an excellent technique for handling of the kink, spiral or redundant internal carotid artery. It can be performed while patients under local or general anesthesia according to the general condition and cooperation of the patient.*

**Key words :** *recurrent stroke, recurrent stenosis, conventional CEA.*

## **TOTAL KNEE REPLACEMENT IN SEVERE DEFORMITIES**

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### **Abstract**

*Total knee replacement in severe deformities is a challenging procedure. Varus and flexion are the commonest deformities seen. Thorough soft tissue release and balancing is the key to a successful outcome. We tried to correct these cases without the need for expensive augments and specialized prosthesis.*

*Our study included 30 knees in 23 patients with severe flexion and varus deformities. The average preoperative varus deformity was 20° (range, 14-38°) and the average flexion deformity was 15.6° (range, 5-30°). Bone graft was used in 8 cases (26 %) and tibial stems in 2 cases (6%). No constrained prosthesis was used.*

*The average follow up was 31 months (range, 8-65 months). The average postoperative range of flexion was 115° (range, 90-147°), range of extension between 0-6° and the average varus correction was 26° (range, 12-42°). At the final follow up, we had 15 excellent, 12 good, 2 fair and 1 poor functional result, giving a 90% success rate.*

*Our techniques resulted in restoration of alignment and stability without the need for wedges or constrained prosthesis with encouraging early and mid-term results.*

**Keywords;** TKA, Varus deformity, soft tissue release, bone grafts.

## **SKEW-FLAP BELOW KNEE AMPUTATION**

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Faculty of Medicine, Mansoura University, Egypt*

### **Abstract**

**Background:** Major amputations may be necessary in patients with diabetic foot sepsis or advanced critical limb ischemia in whom no other treatment option is available. Preservation of the knee joint and sufficient stump length in these patients are very important for successful rehabilitation. In our study, skew-flap below knee (BK) amputation was done to preserve a functional BK stump for those who were unable to receive the conventional long posterior flap BK amputation.

**Methods:** Between January 2003 and January 2008, we performed 33 skew-flap BK amputation in 32 patients. All the patients were unable to achieve a functional stump by using the conventional long posterior flap amputation because of damaged posterior skin flap by massive diabetic sepsis in 20 patients and advanced critical limb ischemia in 12 patients.

**Results:** Thirty-three skew-flap BK amputations were successfully done in 32 patients, the tibial stump ranged from 8 - 13 cm distal to the tuberosity. There was no hospital mortality, no major complications, wound healing was delayed in 2 patients and no patients required reamputation. The median time to full stump healing was 16 days resulting in parallel-sided, hemispherical-ended stumps. No ulceration was encountered in the BK stumps during an average follow up of 7 months.

**Conclusion:** Surgeons must be familiar with alternative methods of BK amputation in different situation if a functional stump is to be preserved. Skew-flap is an excellent option for BK amputation, easy to learn and produces satisfactory shape of the stump allowing early rehabilitation.

**Key Words :** Below knee amputation, skew-flap, Burgess long posterior flap.

## **SURGICAL MANAGEMENT OF CIRSOID ANEURYSMS OF THE SCALP**

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### **Abstract**

**Background:** *Cirsoid aneurysms of the scalp are rare lesions, they can cause disfigured pulsatile masses, headache, excessive bleeding and tinnitus. These lesions are difficult to manage because of their complex vascular anatomy, high shunt flow and cosmetic disfigurement, many options have been described. We report our experience in the surgical management of these lesions.*

**Methods:** *We treated 7 patients with cirsoid aneurysms of the scalp surgically. There were 4 females and 3 males with a mean age of 22 years. History of trauma was present in 3 patients. Frontal region was the site commonly affected. Superficial temporal and occipital arteries were the most frequent feeding arteries. The size ranged from 5 cms to 12 cms. Following investigations were done: X-R skull, duplex, and spiral CT angiography.*

**Results:** *Excision of the lesion was done in all patients after ligation of the feeding arteries. Except one patient had undergone prior ipsilateral external carotid artery ligation, non of the patients underwent previous interventions. All the patients had good cosmetic results and there was no recurrence during an average follow up of 18 months.*

**Conclusion:** *Surgical resection of cirsoid aneurysms seems to be the most effective treatment with good results and patients satisfaction.*

**Keywords:** *Arteriovenous Malformations, Cirsoid Aneurysms, Scalp, Surgery.*

**CIRCULATING LEVELS OF ENDOTHELIN-1  
IN PATIENTS WITH SYSTEMIC SCLEROSIS :  
RELATIONSHIP TO SPECIFIC ORGANS  
INVOLVEMENT**

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**Abstract**

*The aim of this study was to determine the serum levels of endothelin-1 (EN-1) as a marker of endothelial cell activation in patients with systemic sclerosis (SSc) and to investigate its relationship to specific organs involvement.*

*Thirty two female patients diagnosed as SSc were included in this study; all of them met the criteria proposed by the ACR. Serum EN-1 was detected by enzyme linked immunosorbent assay (ELISA) for the patients and 20 matched healthy subjects as a control group. Thorough clinical assessment was performed; high resolution computed tomography (HRCT) scan and scoring was done for patients with pulmonary fibrosis; doppler echocardiography was done to assess pulmonary artery pressure.*

*In this study, there was highly significant increase in the mean titre of EN-1 in SSc patients than in control group ( $<0.001$ ) and significant increase in diffuse than limited SSc ( $P<0.05$ ). Significantly higher levels of Serum EN-1 were found in SSc patients complaining from pulmonary fibrosis, pulmonary and systemic arterial hypertension ( $P<0.001$ ), higher in patients complaining from sclerodactyly, digital ulcers, cardiac and renal affection and in patients positive either for Anti-TOPO-I antibodies or ACA ( $P<0.05$ ). Also, there were significant positive correlation between mean pulmonary artery pressure, mean systemic arterial pressure, levels of serum creatinine, serum urea, 24 hours proteinuria, titre of ANA, anti-TOPO-I antibodies, ACA and HRCT scores with serum levels of EN-1 in*

SSc patients. Also, there was a significant negative correlation with creatinine clearance.

**Conclusion:** *Endothelin-1 through endothelial cell activation has a pathogenic role in SSc that help in evaluation of the clinical severity of scleroderma lung disease, systemic hypertension, cardiac and renal affection. EN-1 may also represent a promising serological parameter for therapeutic consideration; use of endothelin receptor antagonist may be a strategy for reaching clinical improvement.*

## **RANDOMIZED CONTROLLED STUDY COMPARING NIFEDIPINE AND ATOSIBAN FOR TOCOLYSIS IN PRETERM LABOR**

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### **Abstract**

**Objective:** To compare the effectiveness and the safety of Nifedipine versus Atosiban as a tocolytic agent in preterm labor.

**Patients & Methods:** This prospective randomized comparative study was conducted in the Department of Obstetrics and Gynecology, Antenatal Ward of King Khalid Military City Hospital (KKMCH), Northern Region, Saudi Arabia. It included eighty pregnant women diagnosed with preterm labor at 24 -33 gestational weeks and requiring tocolysis. They were randomized to receive Nifedipine orally (n=40) or Atosiban intravenously (n=40) for tocolysis.

**Main outcome measure (s):** The primary outcome measure (examining the tocolytic effectiveness) was the proportion of women undelivered by 48 hours and 7 days from the commencement of treatment. Secondary outcome measure (examining the tocolytic safety) was perinatal morbidity and mortality, and maternal safety outcomes.

**Results:** Delivery was delayed for 48h and seven days in 87.5 % and 72.5 % respectively, of women in the nifedipine group compared with 85 % and 75% respectively, of women in the Atosiban group (no statistical significant difference). Women receiving Nifedipine were significantly more likely to experience flushing ( $p < 0.001$ ) with no significant differences in other maternal side effects between the two groups. The neonatal outcomes were not significantly different in the two groups.

**Conclusion:** Nifedipine was as effective as Atosiban in delaying preterm birth. Both tocolytic agents were found to be well tolerated by both mother and fetus with a comparable neonatal outcome. Considering the great saving on direct drug costs in the Nifedipine group, Nifedipine may be considered for use as a first-line tocolytic agent.

**Key words:** Nifedipine, Atosiban, preterm labor.

## COMPARATIVE STUDY OF LEFT ANTERIOR THORACOTOMY VERSUS VATS IN MANAGEMENT OF PERICARDIAL EFFUSIONS

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### **Abstract**

**Objective:** *The aim of this study is to compare the outcome and results of VATS versus left anterior conventional thoracotomy in the management of pericardial effusions and creation of pericardial window.*

**Patients and Methods:** *Between March 20002 and February 2006, nineteen patients with proved pericardial effusions were included in this study. They were claimed to have pericardial effusions by chest roentgenogram, echocardiography and chest CT. The patients were divided into 2 groups, group I (Thoracotomy group) and group II (VATS group). Group I patients (thoracotomy group) included 11 patients, and Group II patients (VATS group) included 8 patients. Thoracotomy or VATS was performed for evacuation of pericardial effusions, creation of pericardial window and sending the taken biopsies of both the pericardium and fluid for cytological, pathological and histological examinations.*

**Results:** *There was no statistical significant difference between the mean ages of both groups, as the mean age of the thoracotomy group patients was  $47 \pm 7$  years, while it was  $45.5 \pm 7$  years for the VATS group patients. Eight patients (73%) of group I and 6 patients (75%) of group II had symptoms (chest pain or/and dyspnea). Preoperative pericardiocentesis was done in 6 patients (55%) in thoracotomy group and another 6 patients (75%) in VATS group. There was statistical significant difference ( $P$ -value  $\leq 0.05$ ) between the thoracotomy group patients and the VATS group patients in the mean operative time ( $52 \pm 6$  minutes VS  $44 \pm 3$  minutes respectively), and, mean volume of analgesics given in the first 24 hours postoperatively ( $227 \pm 15$  mg VS  $206 \pm 14$  mg respectively), in the*

mean ICU stay ( $5.7 \pm 1$  days VS  $4 \pm 1$  days, respectively), and in the mean hospital stay ( $10 \pm 1$  day VS  $6 \pm 1$  days, respectively) postoperatively. There were no statistical significant difference between the 2 groups of patients in the mean ICT drainage postoperatively ( $737 \pm 170$  mL VS  $673 \pm 110$  mL respectively), and, mean ICT period postoperatively ( $3.7 \pm 1$  days VS  $3.75 \pm 1.5$  days respectively). Biopsies proved malignancies in 5 patients (45%) in group I, and in 4 patients (50%) in group II. Complications occurred more in thoracotomy group of patients than that of VATS group of patients. Mortality (9% VS 0%, respectively), wound infection (9% VS 0%, respectively), and recurrence (18% VS 25%, respectively).

*Conclusion:* Although VATS with the creation of pericardial window requires general anesthesia and single lung ventilation, it is a safe, minimally invasive technique that allows for effective pericardial drainage as well as diagnostic tools. It carries less morbidity and mortality than that of conventional left anterior thoracotomy. We suggest that it should be used in carefully selected patients with proper indications.

## **QUALITY OF DEATH CERTIFICATE COMPLETION BY PHYSICIANS IN QUALYOPIA, BENHA**

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### **Abstract**

**Backgrounds:** all physicians should be able to record the medical cause of death in a consequence order and issue death certificate according to the international form recommended by World Health Organization. In Egypt, most clinicians continue to list the cause of death as "cardiac arrest" or "cardiopulmonary arrest" on death certificate and the government organization accept them as causes of death. The forensic significance of death certificate may not become apparent until many weeks or months later. **Aim:** to evaluate the quality of death certificates issued in Qualyopia, Benha by determining whether any of the items missed or written wrongly or in a vague manner. **Methods:** data of randomly chosen 200 death certificates issued within the year 2006 in Benha health offices was gathered to review the deceased personal data, medical cause of death, place, date and time of death, name and signature of the certifying physician. **Results:** on reviewing a total of 200 issued death certificates, the full name, gender, age and residence of the deceased and the date of death were written in all certificates (100%), while the place of death were omitted in a small number of certificates (5%). There was a vague indication of the medical cause of death in 12%, a correct cause of death with improper sequencing in 49%, and the mode presented as the cause of death in 24% and in 15%, the cause of death was absent. The time of death was the commonest omission from death certificates (67%). There is no place for the name and signature of the certifying physician in the certificates, only the name and signature of the certifying employees. The certifying physicians sign only in death declarations. **Conclusions:** death certificates revealed serious deficiencies as regards cause and time of death; this can bring discredit on doctors, the profession as a whole and can also seriously prejudice the legal proceedings. As accurate issuing of

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*death certificates should fall within the capabilities of all doctors, a periodic workshop about how to issue death certificate properly was recommended as well as establishment of quality control program before issuing death certificate.*

**Keywords:** *Death certificate, Quality, inaccuracy, Qualityopia*

## **POST LASIK INTRAOCULAR PRESSURE VARIATION RISK OF GLAUCOMA**

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### **Abstract**

**PURPOSE:** *To compare the preoperative and postoperative measurements-of intraocular pressure (IOP) using Goldmann applanation tonometry (GAT), in eyes undergoing myopic laser in situ keratomileusis (LASIK).*

**METHODS:** *IOP was measured in 40 myopic eyes before and 6 months after LASIK by using (GAT)*

**RESULTS:** *After LASIK, there was a reduction in mean corneal pachymetry of 102µm and in IOP measurements with GAT ( 3.4 mm Hg; P < .01) there is a statistically significant correlation between IOP measurements and corneal thickness,*

**CONCLUSION:** *To obtain precise IOP data subsequent to refractive surgery, studies of various parameters that may impact the underestimation of the IOP are of considerable importance especially in myopic patients that have higher risk of glaucoma .*