

Poster Hall

Ligation of intersphincteric fistula tract for complex anorectal fistulas with initial promising result

Wael Barakaat Ahmed Mohamed, Ahmed Eisa Ahmed

Background: The aim of anal fistula treatment is to cure the disease without any risk of fecal incontinence. Surgical techniques used in treating anal fistula can be divided into 2 groups: sphincter-sacrificing and sphincter-sparing methods. There are a number of sphincter-sparing methods such as application of fibrin glue, endorectal advancement flap, video-assisted technique) and ligation of the intersphincteric fistula tract.

Objective: evaluation of the effectiveness of intersphincteric ligation technique of the fistulous tract in the treatment of complex anal fistula.

Design: A prospective study of complex fistula-in-ano patients was carried out from 1st September 2013 to 31th January 2015. Data collected included patients' demographic details, fistula type determined by magnetic resonant imaging, preoperative and postoperative continence status, previous operations, healing rates, recurrence rates, and types of failure examined by magnetic resonant imaging, re-operation in recurrence or failure cases, and complications.

Settings: The study was conducted at a single tertiary care institution.

Patients: 18 patients were included.

Main Outcome Measures: include recurrences, surgical time, complications, and fecal incontinence.

Results: The study included 18 patients. Two patients were female and sixteen male. The mean age was 35.55 ± 9.89 . The median wound healing time was 2.44. Of these, sixteen (88.9%) had complete healing of the fistula. None of the patient developed fecal incontinence.

Conclusion: The ligation of intersphincteric fistulous tract proved to be effective for the treatment of anal fistula. It is also a good option for maintaining continence and sphincter preservation in management of fistula-in-ano.

Anal piles excision by local anesthesia

Rafek Abdo Hamed Gafar

Excision of Piles and fistula by extra vascular anesthesia with good results

Comparison between laparoscopic and open abdominal rectopexy for full thickness rectal prolapse: Controlled clinical trial

Omar Abdelraheem, Magdy Khalil

Background: Abdominal rectopexy is an appropriate treatment option for full thickness rectal prolapse (FTRP). Our aim is to evaluate the effectiveness and surgical outcome of laparoscopic posterior mesh rectopexy in treatment of FTRP by comparing this procedure with the traditional open approach.

Patients and Methods: Thirty consecutive cases with FTRP were included and subjected to abdominal posterior mesh rectopexy from September 2013 to February 2016 at Sohag University Hospital. Thirteen patients were managed laparoscopically and 17 patients underwent open posterior mesh repair. Demographic data and surgical outcome were compared in both groups.

Results: Operative time in laparoscopic group is more than open group, but without significant statistical difference ($P=0.45$). Laparoscopic group showed an earlier tolerance to oral feeding (1.26 ± 0.42 vs. 2.16 ± 1.36 days, $P=0.03$), and earlier hospital discharge and return to work (5.63 ± 2.91 vs. 8.24 ± 4.64 days, $P=0.016$, 18.28 ± 2.61 vs. 28.64 ± 3.82 days, $P=0.032$, respectively). The mean consumed postoperative analgesics per day was less among laparoscopic group (1.63 ± 16.2 vs. 2.68 ± 34.21 ampoule/day, $P=0.012$). Incidence of wound infection, wound dehiscence, prolonged ileus and postoperative chest infection were more in open group. There were significant postoperative improvement of continence status, rectal bleeding and abdominal pain in each group. Incidence of postoperative constipation was slightly increased without significant difference. Recurrence occurred in one case only in open group. There were no mortalities in both groups.

Conclusions: Laparoscopic posterior mesh rectopexy for FTRP can be done safely even in elderly patients. It offers less postoperative pain, low incidence of postoperative morbidities, early hospital discharge and return to work, in addition to cosmetically better outcome. Laparoscopic rectopexy has the same functional outcome as open technique.

Evaluation of doppler-guided hemorrhoid artery ligation with recto-anal repair for treatment of advanced hemorrhoidal disease

Mohammad Said Hedaya, Ahmed Hazem Helmy

Background: Doppler guided hemorrhoid artery ligation (DG-HAL) with recto-anal repair (RAR) is an established minimally invasive method of treatment of advanced hemorrhoidal disease

Aim: 52 weeks follow up results of (DG-HAL) with (RAR) in treatment of advanced hemorrhoidal disease.

Methods: 50 patients with grade 3 and 4 hemorrhoids underwent the HAL-RAR procedure after obtaining IRB and consent form. Patients were followed up at 3-6-12 months

Results: 30 males (60%) and 20 females (40%) with mean age 49 years underwent HAL-RAR procedure for hemorrhoidal disease (42% third degree and 58% fourth degree)

The average admission duration was 1.3 ± 0.9 days. the operative time was 31 ± 5 min and return to daily activity was at 3.2 ± 2 postoperative day there were no major complications, 3 patients (6%) reported persistence of symptoms 3 months after the procedure while on 12 months follow up another 2 patients showed recurrence with total number of 5 (10%).

Conclusion: HAL-RAR procedure proved to be a safe and effective treatment option for advanced hemorrhoidal disease.

Can anorectal physiologic tests modify surgical decision ?

Mohamed El-Hemaly

Modern medicine has become more & more scientific by introduction of different investigative tools. Multidisciplinary approach & multimodality treatment are essential in anorectal disorders to obtain a successful outcome. Surgeon should be familiar with detailed anatomy of the sphincter & pelvic floor. Surgical procedures for anorectal diseases should not be done except after full investigations as they help modify decision, eg. anorectal manometry is useful in determining the proper surgical procedure for treating anal fissure patient with hypertonic sphincter will benefit from sphincterotomy. Pt with normo or hypotonia may benefit from a more limited sphincterotomy (Tailored sphincterotomy). Patients with rectocele should have certain criteria to do surgery, otherwise failure is the result. Also closure of colostomy should not be done except after identifying the functional status of the sphincter complex.

Closure of appendicular stump using absorbable polydioxnon endoclips in laproscopic appendectomy

Wael Barakaat Ahmed Mohamed, Ahmed Eisa Ahmed

Background: Since 1983 when the 1st laparoscopic appendectomy was described by Semms, different methods for closure of the appendicular stump during laparoscopic appendectomy such as linear stapler (Endo GIA), endoloop ligature, intracorporeal suture and metal endoclips were used. The use of non-absorbable

plastic clips was described in several studies which reported the low cost and easy application of these clips.

Aim of the work: To evaluate the efficiency of closure of appendicular stump using large violet polydioxanone endoclips [ABSOLOK AP 400TM, Johnson & Johnson, USA] techniques as regard the intraoperative and postoperative complications.

Patients and Methods: This prospective study was conducted From June 2014 to October 2015 in General surgery department Sohag University Hospitals, Sohag, Egypt. 40 patients undergoing laparoscopic appendectomy with closure of appendicular stump using large violet polydioxanone endoclips [ABSOLOK AP 400TM, Johnson & Johnson, USA, USA] were University Hospitals.

All patients had informed written consent prior to surgery.

Primary outcome measures: were feasibility of the clip, intra-abdominal surgical site (abscesses, stump leakages) and superficial wound infections.

Results: The staples were applicable in nearly 80% of patients. Reasons for not applying the clip were mainly an inflamed caecum or a too large diameter of the appendix base. Superficial wound infections were found in two (5%), intra-abdominal abscesses in one (2.5%), no leak from appendicular stump was detected,

Conclusions: The results suggest that the absorbable polydioxnon endo clip is a safe and effective option in securing the appendicular stump in laparoscopic appendectomy.

Evaluation of handmade Eextra-corporeal loop versus metallic clips in securing the appendicular stump in laparoscopic appendectomy

Abdallah Mohamed Taha

Background: Laparoscopic appendectomy has gained popularity due to the advantages of minimal-access surgery. Inadequate closure of the appendix stump leads to intra-abdominal surgical site infection or even fecal fistula. The base of the appendix can be secured with endostapler, endoloops, metallic clips or intracorporeal ligature.

Aim of the study: To evaluate the handmade extra-corporeal loop versus endoclip in securing the base of the appendix in non-complicated acute appendicitis.

Methods: During the period from January 2013 to February 2016, in South Valley University, Aswan University and Sohag University hospitals (these are tertiary hospitals), 400 laparoscopic appendectomy patients were included in this prospective study. In total, 240 patients were female and the overall average age was 25.6 years old. Patients were divided into two

equal groups (group L and group C): in group L, handmade extracorporeal loop was used to secure the base of the appendix, the metallic clip was used in group C.

Results: The mean operative time was 49 min in group L and 35.4 min in group C ($P < 0.05$). The mean hospital stay was 2.07 days in group L and 2 days in group C, and this was not significant ($P > 0.05$). Complications varied between portsite wound infection and delayed intestinal sounds, fecal fistula and there were no statistically significant differences. **Conclusion:** Using extracorporeal handmade loop or the metallic clips to secure the appendicular stump is safe, feasible, easy and inexpensive methods. The loop takes a little more time in its preparation. Metallic clips are inappropriate for edematous wide base appendix.

No Conflict of interest.

Minimally access versus conventional hydrocelectomy: A Randomized Trial

Aly Saber

Objective: To compare our previously published new minimally access hydrocelectomy versus Jaboulay's procedure regarding operative outcome and patient's satisfaction.

Materials and Methods: A total of 124 adult patients were divided into two groups: A and B. Group A patients were subjected to conventional surgical hydrocelectomy (Jaboulay's procedure) and group B patients were subjected to the new minimal access hydrocelectomy. The primary endpoint of the study was recurrence defined as a clinically detectable characteristic swelling in the scrotum and diagnosed by the two surgeons and confirmed by ultrasound imaging study. The secondary endpoints were postoperative hematoma, wound sepsis and persistent edema and hardening.

Results: The mean operative time in group B was 15.1 ± 4.24 min and in group A was 32.5 ± 4.76 min ($P = 0.02$). The mean time to return to work was 8.5 ± 2.1 (7–10) days in group B while in group A was 12.5 ± 3.53 (10–15) days ($P = 0.0001$). The overall complication rate in group B was 12.88% and in group A was 37%. The parameters of the study were postoperative hematoma, degree of scrotal edema, wound infection, patients' satisfaction and recurrence.

Conclusion: Hydrocelectomy is considered the gold standard technique for the treatment of hydrocele and the minimally access maneuvers provide the best operative outcomes regarding scrotal edema and hardening and patient's satisfaction when compared to conventional eversion–excision hydrocelectomies.

Impact of Sleeve gastrectomy and Gastric bypass Versus conservative therapy on obesity comorbidities after 5 years

Mohamad Elrefai

Background: Obesity represents nowadays a global epidemic with more than 400 million individuals worldwide are obese. Obesity is not only a burden per se, but is also tightly connected to large number of diseases e.g. diabetes mellitus type 2, hypertension, dyslipidemia, fatty liver, gout, sleep apnea, reduced life expectancy, increased mortality and incidence of several types of cancer.

Being a global health problem with several individual and national burdens, several treatment modalities have been implemented to combat morbid obesity, namely medical and surgical therapies.

Since surgery for obesity has gained popularity, several studies of varying scientific quality compared outcomes of bariatric surgery to results of conventional medical therapy of morbid obesity. Results clearly emphasized the superiority of surgical treatment in terms of weight loss, improvement of comorbidities and health related quality of life and decreased mortality rates among the surgical group for a period up to 24 months after operation.

However, still not well understood, if the beneficial results of surgery extend for a longer period of time or not.

Aim of Study: This clinical study was planned to examine the impact of bariatric surgery procedures (LRYGB and LSG) on obesity related comorbidities in comparison to conventional medical therapy of morbidly obese patients after 5 years.

Measured outcomes were weight loss, changes in hypertension, diabetes, dyslipidemia, quality of life, physical activity and psychological status.

It also aims at comparing the efficacy of LRYGB versus LSG in terms of weight loss and improvement of obesity associated comorbidities after 5 years.

Methods: Patients were recruited from the outpatient clinic for obesity care, Mannheim medical center, Heidelberg University, Germany. The previously examined patients were contacted through a letter per post followed by a personal phone call for making a fixed follow up appointment. 30 operated patients were matched and compared to 30 patients in the conventional group who received medical therapy of obesity.

A complete physical examination was conducted to record blood pressure, circumferences of the neck, arm and waist, percentage of excess weight loss and percentage of total weight loss.

Subclinical atherosclerosis was evaluated by ultrasonic measurement of intima media thickness (IMT) of the right common carotid artery in order to detect any subclinical vascular disease.

Endothelial dysfunction was assessed by digital fundus imaging and measurement of retinal arterial and venous ratio (AVR) and flicker reaction as surrogate markers of atherosclerosis.

Patients were asked to answer the validated German version of Bariatric Quality of life Index questionnaire to estimate their quality of life after therapy. Patients' physical performance was evaluated through the International Physical Activity Questionnaire (IPAQ). Patient Health Questionnaire (PHQ)-long was used as a diagnostic tool for diagnosis of psychological and mental health status of patients.

Results: Our results showed significant superiority of bariatric surgery in terms of sustained weight loss. Marked reduction of weight (-45.4 kg) and all body measurements (waist and neck circumferences -33.2 cm and -7.2 cm respectively) were reported among patients belonging to the surgical group. % EWL and % TWL were 59.7% and 29.4% after bariatric surgery versus 3.3% and 0.5% respectively among medical patients ($P < 0.001$).

We observed reductions of both diastolic (± 1.6 mm Hg) and systolic blood pressures (± 3.3 mm Hg) in the surgical group. However, all values of blood pressure changes between 2 groups didn't reach a statistical significance.

Bariatric surgery resulted in improvement of patients' lipid profile. Total plasma cholesterol dropped by -37.2 mg/dl after surgery versus only -4.2 mg/dl in conventional therapy group ($P < 0.001$). Triglycerides and LDL dropped postoperatively by -48.8 mg/dl and -37.9 mg/dl respectively. HDL rose significantly from 47.2 ± 10.1 to 58.9 ± 14.8 after surgery ($P = 0.04$). On the other hand, lipid profile among patients who received medical therapy remained nearly unchanged.

We also observed clear beneficial impact of surgery on glucose metabolism. Baseline fasting blood sugar decreased significantly from 106.1 mg/dl to 92.1 mg/dl. Plasma insulin dropped by -14.2 mU/l ($P < 0.0001$). In contrary, patients in control group didn't experience an improved glucose metabolism. Mean fasting blood sugar increased by +5.4 mg/dl and plasma insulin by +2.3 mU/l.

Bariatric surgery resulted in significant remission of impaired glucose tolerance and type 2 diabetes. After mean of 5 years, 66.2% of our operated patients with DM at baseline examination were in remission at follow up versus 25% in control group.

Subclinical atherosclerosis as measured by IMT was reduced by -0.03 mm among the surgical group and increased by +0.05 mm in medical group.

However, IMT changes between both groups didn't reach significance level ($P = 0.5$)

Our results show that bariatric surgery resulted in an amelioration of endothelial function. AVR increased significantly in interventional patients (+0.03, $P = 0.05$). In control group, AVR deteriorated and decreased with time by (-0.03) reflecting metabolic aggravation of endothelial dysfunction.

Patients who received surgical treatments for morbid obesity were able to achieve a better QOL score than patients who were conventionally treated. Mean score for bariatric patients was 3.5 (Good) versus 2.9 points (Satisfactory) in the control group ($P < 0.01$).

Surgical group patients were more active and showed improved physical activity than other ones. 79.4% of bariatric patients were highly and moderately active versus 68.4% of control patients. 65.5% of surgical patients versus 57.9% of conventionally treated patients had a normal mental and psychological status. However, difference between both groups was not statistically significant.

Results of patients within the surgical group were further analyzed to compare the efficacy of LRYGB versus LSG after 5 years of operation in terms of weight loss, improvement of comorbidities and rate of postoperative complications.

After 5 years, difference between the 2 surgical procedures became clearer; patients undergoing LRYGB had a mean %EWL of $66.2 \pm 21.7\%$ compared with $53.2 \pm 24.5\%$ in the LSG group ($P = 0.02$).

Both procedures improved equally the obesity associated dyslipidemia. After LRYGB, baseline fasting blood sugar decreased significantly from 107 mg/dl to 87.9 mg/dl (-19.1 mg/dl reduction, $P < 0.001$). On the other side, patients after LSG experienced an improved glucose metabolism, yet not reaching the same achieved after LRYGB.

After mean of 5 years, 57.2% of our LRYGB patients with T2DM at baseline examination were in remission at follow up versus 47.9% after LSG ($P = 0.03$).

IMT changes were identical after both procedures. Whereas, our results show that AVR increased significantly after LRYGB by +0.04 versus +0.02 after LSG. This difference indicates a better amelioration of endothelial function after gastric bypass than sleeve gastrectomy.

No significant difference between LRYGB and LSG was reported in current study regarding improved QOL or enhanced physical activity 5 years after surgery.

Conclusion: Bariatric surgery is more effective than conventional medical therapy of obesity in terms of sustained weight loss, improved dyslipidemia and remission of diabetes mellitus.

Beneficial metabolic impact of bariatric surgery on obesity related comorbidities can be witnessed on long term follow up after 5 years.

Mini gastric bypass versus R-En-Y gastric bypass in middle aged super obese Egyptian patients

Mansour M. Abdelkhalak

Aim of the study: Comparative study between outcomes efficacy and safety of Laparoscopic Mini Gastric Bypass (LMGB) versus Laparoscopic R-En-Y Gastric Bypass (LRGB) for the treatment of middle aged super-obese Egyptian patients.

Introduction: Advantages of the Mini Gastric Bypass. The single anastomosis that confers a degree of technical simplicity and the benefit of potentially fewer sites for anastomotic leaks to occur and Fewer sites for Internal Hernias, with MGB because the potential sites for internal hernias are reduced to one (Petersen's defect. Reduced Technical Complexity is evident with a shorter learning curve and a shorter operative time. Furthermore, ease of reversal and revision has been described in published reports on this procedure. Demonstrated safety and efficacy There is now published experience with this procedure by a number of surgeons from different parts of the world. Their results, to date, suggest non-inferiority of MGB compared to the gold standard Roux en Gastric Bypass in terms of mortality, weight loss, comorbidity resolution, and quality of life.

Patients & Methods: two hundred and forty patients divided into two groups. 120 patients underwent LMGB and 120 underwent LRGB at the AL-Azhar university hospitals and other certified hospitals and private centers, from Jun. 2013 to Nov. 2015 were done.

Results: Mean operative time of the procedure was significantly lower in the LMGB group (50 ± 5 min vs. 120 ± 15 min). Intraoperative complications more happen in LRGB, bleeding 2 cases controlled by sutures and clips and electrocautery. 3 cases of injuries to the liver, LMGB group, 2 cases (1.6%) of leaks need readmission and insertion of endoscopic stent. gastro-esophageal reflux confirmed by Endoscopy that respond well to proton pump inhibitors, abstinence of smoking, diet instructions. Abdominal pain, vomiting, pain (7 patient = 5.8%) due to cholecystitis 2 cases laparoscopic cholecystectomy done easily. Compared with LRGB

4 cases (3.3%) of leaks need readmission and insertion of endoscopic stent, one case of hematoma aspirated under CT guided, 2 cases for severe vomiting due to stomal oedema treated by conservative IV fluid. 2 cases of marginal ulcer and abdominal pain, vomiting (13 patient = 10.83%) 6 cases due stricture treated by endoscopic dilatation after an initial upper gastrointestinal endoscopy and contrast study, 4 cases of calculi cholecystitis subjected to laparoscopic cholecystectomy, 2 cases of marginal ulcer conservatively managed and 2 cases of internal hernia diagnosed laparoscopically then converted to open due to gangrenous loops. No mortality in both group.

Discussion: Mini Gastric Bypass considered the 3rd performed procedure for weight control worldwide nowadays. MGB has a high patient acceptance and most patients report a significant improvement in the quality of life, Mini Gastric Bypass, a quick to perform and low risk procedure with minimal postoperative complications experienced by the patients. Because of the minimum trauma associated with this procedure, the postoperative recovery period is in the region of 24 h. The patients recover quickly and can resume their activities within two to three days. The weight loss that occurs subsequently, is not accompanied by nutritional or metabolic disturbances. *Conclusion:* The efficacy and safety of Mini Gastric Bypass is evident its simple procedure, its outcomes were favorable with a low complication rate, no mortalities and favorable weight loss compared with Roux-En-Y Gastric Bypass. It has less time consuming and shorter hospital stay.

Conflict of interest: A multidisciplinary coordinated team work between laparoscopic bariatric surgeon, internal medicine and radiologist is very important to accomplish accurate and early complication management.

Value of laparoscopic exploration in abdominal pain

Mokhtar Abdelrahman Bahbah

Female patient with right iliac fossa pain, mild fever and vomiting. The history of pain was 1 month ago with intermittent course.

The ultrasound and CT scan showed only minimal fluid collection in the right iliac fossa.

The patient was put under conservative treatment 24 h but no relief, so diagnostic laparoscopy done and revealed a piece of wood penetrating the terminal ileum. There is a video of this lap. Exploration.

So we recommend laparoscopic exploration for all cases of lower abd. Pain.

Management of blunt anorectal trauma

Wael Barakaat Ahmed Mohamed

Background: Blunt anorectal trauma is very uncommon forming 4–11% of all rectal traumas. Little information about management of blunt anorectal injuries available in the literature. No consensus about management of blunt anorectal injury available although there is considerable morbidity and mortality in this study we gave our experience in management of such injury.

Patients and methods: This was a retrospective study of patient with blunt anorectal injury who were admitted to emergency surgery department at Sohag university hospitals from October 2013 up till 1st February 2017 were included in this study.

Result: 15 patients with blunt anorectal trauma that had fulfilled our inclusion criteria were included in this study. their age ranges between 5–42 years old, 12 patients were male. In twelve patients' trauma caused by road traffic accident, in three patients trauma due to falling from a height. five patients presented with bleeding per rectum, three patients had anal pain and seven injury discovered accidentally during secondary survey. one patient had associated fracture spine, one patient had fracture femur, seven patients had fracture pelvis, two patients had another type of injury and two patients had isolated anal sphincter injury. All the patients were managed according to advanced trauma life support protocol. During secondary survey examination under general anesthesia was done, the rigid proctoscopy examination was done. Injury to the anal sphincter complex was discovered in 13 patients. All patients with blunt anorectal injury were managed by primary repair of the rectum and anal sphincter. covering Pelvic colostomy was done in twelve patients, three patients didn't have stoma, fourteen patients had a good anal tone [Kirwan's grade 1]. One patient incontinent to flatus [Kirwan grade 2].

Conclusions: Primary repair of the anal sphincter complex with covering colostomy at the time of injury was our recommended treatment option for blunt anal sphincter injury.

TRANSANAL ENDORECTAL PULL-THROUGH OPERATION VERSUS TRANSABDOMINAL PULL THROUGH SOAVE'S IN MANAGEMENT OF HIRSCHSPRUNG'S DISEASE

Mohamed Fathy Abdelrahman, Mohamed Mahmoud M. Khedre, Ahmed M. Akoula

Background: TERPT is a relatively new procedure in management of congenital Megacolon and differs from traditional procedures. Our objective is to evaluate the

postoperative outcomes after trans-anal endo-rectal pull-through (TERPT) and comparing them with the outcomes after soave's operation.

Patients and Methods: Thirty patients underwent TERPT and named group 1 and another thirty patients underwent soave's operation transabdominally and named group 2; all after being diagnosed by barium enema and anorectal biopsies. Early postoperative assessment of complications were recorded and compared. Patients were followed up postoperatively at the outpatient clinic at 14 days, one month, 3 months and some cases up to 6 months. *Results:* Thirty patients (23 male and 7 female patients) underwent TERPT and named group 1 and thirty patients (25 male and 5 females) underwent soave's operation transabdominally and named group 2. The mean age of the studied patients in group 1 was 11.5 ± 10.2 months, while in group 2 it was 18 ± 10.5 months. The operative time was less than 60 min in 10 cases (33.3%) in group 1 while in group 2 no cases could be finished before 90 min with significant *P* value (0.002). The length of resected bowel in group 1 ranged from 10 to 30 cm and its mean was 17.1 ± 4.4 cm, while in group 2 it varied from 10 to 40 cm. Postoperative hospital stay ranged from 3 to 6 days in group 1 and ranged from 4 to 10 days in group 2.

Enterocolitis occurred in 5 patients (16.7%), 4 of them relieved by conservative management in group 1 and occurred in 4 patients (13.3%) in group 2. Perianal excoriation occurred in 6 patients (20%) in group 1 and occurred in 7 patients 23.3% in group 2. Strictures occurred in 3 patients (10%) in group 1 and in 4 (13.3%) in group 2. Incontinence occurred in 3 patients (10%) in each group. All complications respond to conservative or medical treatment. Anastomotic leak occurred in one case only in group 2. Also cuff abscess occurred in 2 cases in group 2 only.

Conclusion: TERPT is effective and safe in the management of infants with congenital megacolon as it has less operative time and less complications including cuff abscess and anastomotic leak with shorter postoperative hospital stay and with no scar.

The minimum knowledge needed for successful outcome after operations for anorectal disorders

Mohamed El-Hemaly

Aim: To present the underlying causes of unsuccessful outcome after operations for anorectal diseases done by general surgeons aiming to choose the proper treatment modality for the proper patient.

Patients & Methods: The study was done in gastroenterology surgical center on patients coming

with troubles after surgery for anorectal diseases done by general surgeons through the last 15 years. Patients included different age groups not satisfied after operation for their disease like:

Faecal incontinence after operations for perianal fistula, anal fissure, piles. Recurrent fistula after specific cause like TB, Crohn's disease, IBD. Persistent bleeding after treating secondary piles Functional constipation after operation for rectocele & anismus. Unnecessary operation after false barium enema without completing investigations.

Results: the main underlying causes as we did see:

- Neglect of history & proper examination
- Overlap of symptoms & misinterpretation
- Neglect use of proper investigation or doesn't complete the work-up
- Synchronous cancer
- Doesn't know the recent anorectal tests like anorectal manometry, defecography, colon transit, end anal ultrasound endocoil MRI Doesn't respect functional disorders
- Doesn't know other lines of therapeutic modalities like biofeedback therapy
- Psychologically unstable

Conclusion: Surgical procedures for anorectal diseases should never be delegated to unsupervised junior resident staff or general surgeon not well-trained on such operations

Outcome of surgery following neoadjuvant chemoradiotherapy for esophageal and gastroesophageal carcinomas: a retrospective clinical study

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Background: Esophageal cancer is the eighth most common cancer and sixth most common cause of death from cancer worldwide. It is estimated that 16 980 people will be diagnosed with and 14 710 men and women will die of cancer of the esophagus. Neoadjuvant chemoradiotherapy has recently become the focus of interest in an effort to prolong survival and reduce recurrence rates in patients with esophageal cancer.

Objective: The objective of this study is to determine National cancer institute experience about the role of preoperative chemoradiotherapy followed by esophagectomy for esophageal and gastro-esophageal carcinomas and its pathological outcome, resectability and the survival rate.

Patients and methods: This retrospective study was conducted at the surgical oncology department of the National Cancer Institute, Cairo University. The study will include patients with oesophageal and oesophago- gastric carcinoma treated and followed up in NCI through the period from January 2010 to January 2015.

Resut: The age of the patients at the date of diagnosis ranged between 30 and 67 years. The most common histological type was squamous cell carcinoma (58%) while adenocarcinoma was 40% . The number who reached complete pathological response was 30%. The overall survival mean and median are best in patient receive neoadjuvant treatment by 12 months and 9.5 months respectively compared to 9 months and 4 months in group 2>2 years overall survival represented 10% of patients which was in stage 0 and IIA. As well as DFS was similar to OAS.

Conclusions: In this study, neoadjuvant CRT could achieve good results in terms of survival and disease-free progression in patients with advanced esophageal adenocarcinoma. CRT achieves better histological results without increasing postoperative morbidity or mortality.

The anti-inflammatory properties of ginger (zanjabil) consumption between ibd experimental models affected by gut microbiota composition and activity

Nazeha A. Khalil

Growing data suggest that ginger (*Zingiber officinale*) has important compounds (gingerol, shogaol) that give it antioxidant and anti-inflammatory properties. This study evaluated the ginger anti-inflammatory role affected by gut microbiota composition and activities between colitis rats (5% DSS). Rats were divided randomly into control and 1% fresh ginger supplementation (diets then were sacrificed one weeks later. Colon to body weight ratio was evaluated then each colon homogenized and diluted (wt/vol 1/10) in normal saline. Also faecal samples were collected before and after colitis induction (0, 24, 48, 72, 96 h, and day 7) then placed in sterile tubes, weighed and diluted five times. One-tenth ml of each dilution (colon and faecal) was placed in selective media for the isolation of *Bifidobacteria*, *Clostridium histolyticum*, SRB and *Lactobacillus* in addition to SCFAs analysis. Results showed valuable effects of ginger consumptions against DSS induced colitis. Also colon/body weight ratio (index of tissue edema) was markedly decreased in the colitis rats after administration of ginger. However, the colonic microbiota counted is relatively higher in both of

Bifidobacteria and *Lactobacillus* in the group that was receiving ginger (colon and faecal) in contrast to no ginger. However, the *Clostridium* and SRB numbers were lower in rats with ginger supplementations. Current research shows that ginger consumption caused significant increase in propiotics species presented in the colon and faecal samples; that was previously confirmed by us as diets and gut microbiota interactions modulating the development of colitis.

Nutrition, Gut Microbiota and inflammatory bowel diseases

Nazeha A. Khalil

Inflammatory bowel disease (IBD) is a chronic disorder of the gastrointestinal tract characterized by inflammation and tissue damage within the large intestine. Ulcerative colitis (UC) is the most common form of IBD; however, the cause remains unclear although diet and genetic factors along with colonic microbiota are thought to contribute. Colonic bacteria show an imbalance in composition for UC patients suggesting that the microbiota play a role in propagating the disorder, particular, sulphate reducing bacteria (SRB) that produce the toxic respiratory end product, hydrogen sulphide. It is cytotoxic and inhibits butyrate utilization by colonocytes leading to colonic inflammation. *In vitro* cultures (batch and gut models) were inoculated with faecal slurries from normal/UC patients and included alternative dietary carbon sources (mucin, peptone and starch, with no additions). Gut models were propagated for about two weeks without any addition then were cultured for another two weeks with sulphate. The key bacterial groups were monitored; short-chain fatty acid (SCFA) and hydrogen sulphide levels were measured. SRB growth with normal inocula was favoured by the presence of peptone whereas the other bacterial groups showed different substrate preferences. SCFA levels in the cultures inoculated with UC faecal samples were reduced compared to those inoculated with normal inocula. In addition, beneficial butyrate production was greatly stimulated by starch in the normal cultures. UC faecal inocula showed a major change in the composition of the gut microbiota for UC subjects with loss of beneficial probiotic species. Furthermore, measurements of gap junctions in Caco-2 cell colonocytes monolayers by trans-epithelial electrical resistance (TEER; an indicator of mucosal barrier function), showed huge decreases.

Patterns of liver cells microscopic changes during liver ischemia and ischemia reperfusion injury in animal model

Wael Mohamed Tawfik

The aims of the current work are to investigate:

- (1) The effect of different periods of in-situ warm ischemia and ischemia/reperfusion on liver function and liver histology.
- (2) If there is any correlation between histological liver changes due to IRI and increased liver enzymes levels.

Methods: Adult male Wistar Albino rats weighing 350–400 g were used in the experimental studies. The rats were anaesthetized with Ketamin 0.7 ml per 100 g body weight injected intramuscularly. Laparotomy was carried out, in supine position, via a midline ventral abdominal incision.

Inducing 70% liver ischemia by microvascular clamp for 30, 60 and 90 min In-situ warm ischemia was followed by subsequent reperfusion. Reperfusion was obtained by releasing the clamp. We allow the reperfusion for 60 min Portal blood samples and wedge liver biopsies were taken during the different experimental procedures.

Results: There was no significant difference between (ALT, AST and GGT) levels at the beginning and at the end of ischemia up to 30 min of warm ischemia. However, when warm ischemia exceeds 30 min (60–90 min) there is a significant increase of their levels. Up to 90 min of warm ischemia, there was no significant effect on bilirubin serum level. There was no significant difference between Prothrombin concentration at the beginning and at the end of ischemia up to 90 min of warm ischemia.

There was significant difference between (ALT, AST, GGT bilirubin and I at the beginning and after 30 min of warm ischemia followed by 60 min of reperfusion. Also, there was significant difference between ALT levels at the beginning and after 60 min of warm ischemia followed by 60 min reperfusion.

Mild liver histological changes were found in 100% of rats after 30 min of in-situ warm ischemia.

Mild liver histological changes were found in 16.7% of rats and moderate tissue changes was found in 66.7% of rats while sever tissue changes was found in 16.7% of rats after 60 min of in-situ warm ischemia.

Moderate liver histological changes were found in 66.7% of rats while sever tissue changes was found in 33.3% of rats after 90 min of in-situ warm ischemia.

Moderate liver histological changes were found in 33.3% of rats while sever tissue changes was found in 66.7% of rats after 30 min of in-situ warm ischemia followed 60 min reperfusion. Moderate liver histological changes were found in 16.7% of rats while sever tissue changes was found in 83.3% of rats after 60 min of in-situ warm ischemia followed 60 min of reperfusion

Conclusion: In conclusion, liver ischemia beyond a limited time has pathological effects on the liver which were demonstrated by both laboratory assessment of the liver function tests and microscopic examination of liver biopsy. Effect of ischemia/reperfusion injury is more significant when compared with the ischemic injury alone.

Short-term evaluation of autologous transplantaion of bone marrow-derived mesenchymal stem cells in patients with cirrhosis-egyptian study

Youssef Abdel-Aziz Youssef

Abstract: Background: Stem cell-based therapy has received attention as a possible alternative to organ transplantation. The aim of this study was to asses the safty and the efficacy of autologus transplantation of bone marrow-derived stromal cells in post-HCV liver cirrhosis patients

Methodology: 10×10^6 of isolated human bone marrow stromal cells in 10 ml normal saline were injected in the spleen of 20 patients with end stage liver cirrhosis guided by the ultrasonography and then patients were followed up monthly for six months.

Results: A statically significant decrease was detected in the total bilirubin, aspartate transaminase, alanine transaminase, (P -value <0.01) prothrombin time and international normalized ratio levels (P -value >0.05) while a statically significant increase in the albumin and PC (P -value >0.05) after follow up

Conclusion: this study suggested the safty, feasibility, and efficacy of the intrasplenic injection of autologus BM stromal cells in improving liver function in Egyptian patients with cirrhosis.

Intracapsular Total Thyroidectomy: The No More Complications in Benign Thyroid Diseases

Tarek Rageh

Abstract Introduction: There is still a debate on the operative management strategies for benign thyroid diseases in terms of safety and efficacy.

Aim: Evaluation of the results of intracapsular thyroidectomy as a new technique in management of benign thyroid diseases. Patients and methods: This is a prospective study carried out in Menofia University Hospital, Department of General Surgery from May 2014 to March 2016 on 50 patients with benign thyroid diseases. A new surgical procedure, intracapsular total thyroidectomy, was performed.

Results: Fifty patients underwent intracapsular total thyroidectomy. There was no patient of transient or

permanent recurrent laryngeal nerve injury and no complication of external laryngeal nerve injury. Also, there was no complications of hypoparathyroidism with decreased operative time and hospital stay. Conclusion: Intracapsular thyroidectomy is an effective and safe procedure in benign thyroid diseases and can be done easily with juniors' staff. Keywords: Total thyroidectomy, benign thyroid disease.

Management of phyllodes tumors of the breast; NCI study

Ashraf Sobhy Zakaria

Background: The frequency of mesenchymal breast tumors is very low, being represented mostly by tumors with biphasic proliferation (phyllodes tumors) and less by other types of non-epithelial tumors. From clinical point of view, phyllodes tumors (PT) can mimic a breast carcinoma.

Objective: to review the Management of phyllodes tumors of the breast in the NCI Cairo university during a period of 5 years (2005 till 2010). Material and Methods: retrospective study including 32 patients who diagnosed and treated with phyllodes tumors of the breast between (2005 to 2010). Data were collected from the biostatistics and cancer epidemiology department.

Results: Out of 32 patients; 19 (59.3%) were benign and 8 (25%) were borderline and 5 (15.6%) were malignant; the median age of the study population was 44.5 years (range 18_71years).The radiological tool of diagnosis was breast US and mammography 93.7%. Preoperative fine needle aspiration (FNA) was performed in 12 (37.5%) cases for cytodiagnosis but true cut biopsy was done in 8 (25%) cases only. Lumpectomy was done in 78.1%,simple mastectomy was done in 9.3% and modified radical mastectomy was done only in 12.5% of all cases.Oncoplastic breast reconstruction was done in one case only.

Conclusion: different surgical modalities are considered the main line for management of phyllodes breast tumors. Local recurrence can be avoided with wide local excision from the frist surgery.Axillary LN dissection is not a role in management of breast PT.

Post-mastectomy seroma: Does Dead Space Obliteration Have a Protective Effect?

Abdallah Mohamed Taha

Background: Seroma formation after breast surgery could result in significant morbidity and subsequent delay to commence the adjuvant therapy. A prospective, non -randomized study was done to

assess the effect of obliterating the axillary dead space by sutures with Flap fixation after Breast cancer surgery either by modified radical mastectomy (MRM) or conservative surgery prospectively. In addition, Factors predicting the formation of seroma were analyzed and reported.

Patients and Methods: A total of 164 patients in Assiut and South Valley university hospitals were diagnosed as Breast cancer, they were divided into two groups. The first group had the post mastectomy dead space obliterated (intervention group), the second group had standard wound closure (control group) following either MRM or LAD. Those had immediate reconstruction were excluded from the study. Drains were routinely left in place until the preceding 48-hour output was <40 milliliters/day. The duration of the drains left in place and the incidence of seroma formation were reported. A multivariate analysis for the potential factors associated with seroma formation was done.

Results: Fifty-eight ($n=58$) patients were assigned to the treatment group and 106 ($n=106$) to the control group. MRM was performed on 105 patients (64%) and LAD on 59 (36%). Ten of the 58 patients (17.2%) in the intervention group developed a seroma in comparison to 33 of the 106 control patients (31.1%) ($P=0.03$). There was a significant reduction in the duration of suction drain *in situ* with obliteration of the dead space ($P=0.001$). No statistically significant differences were observed between intervention and control groups with respect to patient and pathological parameters or the incidence of other wound complications. Multivariate analysis revealed that Significant risk factors for seroma formation were No of retrieved L node ($P=0.019$), DM ($P=0.01$), and dead space obliteration ($P=0.04$).

Conclusion: On multivariate analysis, the most significant factors affecting seroma formation were DM, neoadjuvant CTH and Dead Space Obliteration. Dead Space Obliteration following breast cancer surgery is a simple technique that reduces the time of suction tubal drainage, and incidence of seroma formation.

Pre- and Intraoperative Variables Affecting Early Outcomes in Patients Undergoing Pancreaticoduodenectomy

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Introduction: Pancreaticoduodenectomy (PD) remains the standard surgical treatment for various pathologies

of the pancreas and the periampullary area. Nonetheless, PD remains a complicated surgical procedure that can significantly impact a patient's subsequent quality of life.

Aim of the study: The aim of this study is to identify the preoperative and intra-operative variables that might contribute to serious complications and mortality of patients after pancreaticoduodenectomy.

Method: This is a retrospective and prospective hospital based study done on all patients who underwent pancreaticoduodenectomy in National Liver Institute Between the first of January 2008 till the end of June 2013. Files of the patients in the surgery department in National Liver Institute will be revised to collect pre-operative and intra-operative data as regard: Demographic data. Preoperative biliary drainage (ERCP or PTD), preoperative full laboratory investigations including tumor markers, preoperative radiological values including abdominal ultrasound, abdominal triphasic CT MRCP, ERCP, Ultrasound (EUS), Biopsy either radiological guided or EUS, Chest X-ray & CT. Operative variables including type of pancreaticoduodenectomy (Standard or Pylorus-sparing), Blood transfusions, Operative time, Lymph node status, Superior mesenteric vein or portal vein involvement, Consistency of pancreas, type of anastomosis (pancreaticojejunostomy or pancreaticogastrostomy), Pancreatic duct stenting, PV resection and anastomosis. Post-operative data including Histopathological examination of the resected mass (Size of the tumor, type of the tumor, resection margins). During the first six months after pancreaticoduodenectomy serious complications and mortality will be considered as early outcome related to the operation which includes: pancreatic leak, bile leak, delayed gastric emptying, bleeding requiring, blood transfusion, re-exploration (cause, findings and the procedure), and recurrence. Mortality: Hospital mortality: within 30 days after operation, Late mortality within the 1st 6th months.

Results: Between the first of January 2008 and the end of June 2013, 102 patients underwent pancreaticoduodenectomy at the National Liver Institute, Menoufiya University.

As regard univariate analysis, the patient's age is the only preoperative variable found to be statistically significant with the incidence of delayed gastric emptying (P value >0.05).

As regard the univariate analysis of the intraoperative variables, the consistency of the pancreas, pancreatic duct size, operative time and blood loss were statistically significant with the incidence of

pancreatic leak. The Blood loss was significant with the incidence of bile leak. The type of pancreaticoenteric anastomosis, pancreatic duct size and tumor size were significant with the incidence of delayed gastric emptying. The operative time, blood loss and blood transfusion were significant with the incidence of wound infection. As regard univariate analysis, the only pathological variable found to be statistically significant with the incidence of postoperative major complications is the type of the origin of the tumor with the incidence of postoperative bile leak. As regard multivariate analysis, the origin

of the tumor and blood loss was significant with the incidence of postoperative bile leak. The blood loss was significant with the postoperative wound infection.

Conclusion: The patient's age, consistency of the pancreas, pancreatic duct size, operative time, blood loss Type of pancreaticoenteric anastomosis, and tumor size were risk factors with the incidence of major postoperative complications. In multivariate analysis, the origin of the tumor and intraoperative blood loss were significant with the incidence of postoperative bile leak and wound infection.