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Artículo:

Resúmenes de Trabajos Libres y Video del FP-1 a FP-43

FP-1

LAPAROSCOPIC RESECTION FOR COLON CARCINOMA: RESULTS AND LONG-TERM OUTCOME IN 182 PATIENTS
Benhidjeb T, Báirlelmer E, Anders S, Heukrodt B.

Many reports dealing with laparoscopic resection of benign colorectal diseases showed that this method is technically feasible and improve patient comfort. However the use of this technique for malignancy has raised concerns about local cancer control and the lack of long-term results. The purpose of this study is to review all patients who underwent a laparoscopic resection for colon cancer at our hospital between October 1993 and December 2002. The cohort comprised a total of 182 patients (104 male, 78 female) whose average age was 67.5 (42-91) years. The following most common types of resection were performed: sigmoidectomy (n = 85), left hemicolectomy (n = 40), and right hemicolectomy (n = 55). There was no conversion to open surgery. Mean operating time was 165 (65-390) minutes. The postoperative complication rate was 10%, the most common being the anastomotic leakage (2.8%). One patient died of myocardial infarction postoperatively (0.6%). The tumour stages were UICC I (38%), II (49%), III (68%), and IV (27%). Length of specimen resected was 29 (18-71) cm and mean number of lymph nodes removed was 24.5. Resection was curative in 140 patients and palliative in 42 cases. Late follow-up evaluation ranged from 3-125 (median, 39) months. There was no instance of port-site metastases. Two patients developed a local recurrence (1.1%). Overall survival rate was 79.6%. In 79 curative resected patients with a 5-years-follow-up, the survival rate was 90.7% (stage I: 100%, II: 96%, IIIa: 94.4%, IIIb: 72.2%). Our results demonstrate that laparoscopic colon resection for cancer is not associated with a higher morbidity, and mortality. Long term results appears to be at least as good as after open surgery. Nevertheless, results of ongoing randomized trials have to be awaited to determine the definitive role of laparoscopic colon resection for malignancy.

FP-2

MINIMAL INVASIVE SURGERY FOR CROHN'S DISEASE
Birth M, Hildebrand P, Mirow L, Schiedeck THK, Kleemann M, Bruch HP.

Background: Up to eighty percent of all patients with Crohn's disease undergo one or more operations during the course of their illness, despite the fact that conservative treatment plays the major role in Crohn's disease. Efficiency and safety of Crohn-surgery are well proven, but the characteristics of this incurable disease cause reoperations in up to half of all patients. So the objective in today's Crohn-surgery has to be: reduction of operative trauma while retaining a well established treatment regime. Minimal invasive surgery (MIS) appears useful to meet this requirements. **Methods:** From VIII/94 to XII/02 52 patients with Crohn's disease underwent minimal-invasive operative treatment. Average age in these 34 females and 18 males was 33.2 years (16-55 ys.). Indications for laparoscopically assisted ileocecal-resection (ICR) (n = 31), right-hemicolectomy (n = 3), left hemicolectomy (n = 2), resection of sigmoid (n = 2) or ileostomy (n = 14) were non-responding to medical therapy or symptomatic stenosis. Exclusion criteria for laparoscopic treatment were large intraabdominal abscesses or fistulae, acute obstruction or perforation and toxic colitis. **Results:** In 51 patients the operation could be finished laparoscopically. In one case multiple adhesions required conversion to laparotomy. There were no intraoperative complications. Mean operation time was 149 min (35-360 min). In 3 cases postoperative complications (small bowel obstruction, diffuse hemorrhage, peritonitis) required surgical treatment. There was one parastomal hernia 6 months postoperatively. **Conclusions:** Our results show-like it is in the collected literature of a total of 494 interventions-that laparoscapically assisted bowel resection or fecal diversion can be done with a good outcome in well-selected patients with Crohn's disease. Because of individual variation in Crohn surgery, small patient numbers and the lack of controlled randomized studies, no definite evaluations valuation of this therapeutical option can be done at this point of time. Our positive assessment of MIS in Crohn's disease is based on well-known advantages such as increased patient-comfort.

FP-3

LAPAROSCOPIC RESECTION FOR DIVERTICULAR DISEASE
Rotholtz N, Lencinas S, Estruch C, Peczan C, Mezzadri N.

Background: Sigmoid diverticulitis is a common benign disease. However in some patients; acute and chronic diverticulitis may be difficult to treat. **Aim:** To evaluate the safety and efficacy of laparoscopic-assisted sigmoid colectomy for the treatment of diverticulitis. **Methods:** Data was prospectively collected in all patients with diverticular disease who underwent elective laparoscopic sigmoidectomy between September 2001 and October 2003. Patients with other diseases and emergency procedures were excluded. **Results:** 74 patients had the eligible criteria for this study. All patients underwent laparoscopic sigmoid resection 53 (71%) patients underwent surgery for uncomplicated recurrent diverticulitis whereas 21 (29%) for complicated disease (phlemon, fistula, stenosis). Mean body mass index 27 $\pm$ 3.7. No deaths ocurred. Morbidity rate was 18.9%. Conversion ocurred in 10 patients (13.5%). The conversion rate for complicated disease was significantly higher than in recurrent diverticulitis 7 (33%)/21 *vs* 3 (5.6%)/53; p = 0.02). Patients passed flatus after 1.5 $\pm$ 0.8 days. Oral feeding was started after 1.3 $\pm$ 1.1 days for liquids and 2.3 $\pm$ 1.2 days for regular diet. The mean hospital stay was 3.3 $\pm$ 1.5 days (range 1-8). After a median follow up of 18.9 (1-39) months no recurrence of divertuculitis was identified. **Conclusions:** Laparoscopic-assisted sigmoid-colectomy for diverticulitis can be safely performed. Conversion to an open procedure appears to be associated with complicated diverticulitis. Short term follow up indicates that recurrence is rare and suggests that a laparoscopic approach achieves and adequate resection.

FP-4

LAPAROSCOPIC LAVAGE AND DRAINAGE *VS* LAPAROSCOPIC HARTMANN'S PROCEDURE IN ACUTE EPISODE OF SIGMOID DIVERTICULITIS. PRELIMINARY REPORT
Tristán A, Morris EF, Berghoff KR, Jaramillo E. Texas Endosurgery Institute, San Antonio-Tx, USA.

Twenty years ago, classic Hartmann's procedure was the gold standard in the treatment of severe episode of acute complicated diverticulitis. Transforming the patient from an emergent-type surgery to an elective-type surgery is a concept that has been postulated in the recent years; the goal is to avoid the stoma and open surgery morbidity. In our institution this concept has been applied since 1994. An exception to this concept is the presence of severe fecal contamination and/or diffuse pelvic peritonitis; we prefer a laparoscopic lavage and drainage plus Hartmann's procedure in this situation. Our purpose is to realize a preliminary evaluation of the benefits of laparoscopic lavage and drainage as well as its indications in the management of acute complicated diverticulitis. **Methods:** Charts from patients with diagnosis of acute diverticulitis and surgical treatment were reviewed between July 1994 and July 2003. Inclusion criteria were failure with non-surgical treatment and emergent surgery, exclusion criteria were chronic complicated diverticular disease (fistula, strictures), malignancy, primary anastomosis. All the patients were grouped in two main groups: Laparoscopic Lavage and Drainage Group (LLD) and Laparoscopic Hartmann's Procedure Group (LHP). The analysis included these variables: Demographics, symptoms, evolution time, pre-surgical assessment, Hinchey classification based on surgical findings, surgical details (surgical time and conversion rate), post-surgical outcome (pain, fever, PO beginning, complications), hospital-stay and time between this episode and definitive surgery. **Results:** A total of 28 patients were selected for this study; 14 patients were grouped in LLD group and 14 in LHP group, the average age was 58,8 and sex ratio was

1:1, abdominal pain was the main symptom (100%) followed by peritoneal irritation sign (60.7%) and fever (50%), the evolution time was < 48 hr in 21 patients (75%). pre-op CT-scan was done in 16 patients (57%) and US in 13 (46.4%). The LLD group had 50% on Hinchey II and 50% on Hinchey III; LHP group 35.7% on Hinchey II, 35.7% on Hinchey III and 25% on Hinchey IV. The average surgical time for LLD group was 49.5 min, *vs* 129.5 min for LHP group with 7.1% converted cases rate only in this group. The post-surgical outcome was difficult for the LHP group with higher request for extra IV or IM analgesics (14.3% *vs* 57%), prolonged fever episodes (21.4% *vs* 35.7%), prolonged post-surgical fasting (85.7% at 2nd day *vs* 14.2% at 3th day) and higher complications rate (21.4 *vs* 85.7%) being mild to moderated in LLD group (ileus, atelectasia) and moderated to severe in LHP group (atelectasia, parastomal hernia, bacteremia). Wound dehiscence and evisceration were present in the case that was converted. The in-patient time were higher in the LHP group (10.3 days *vs* 4.4 days) and the definitive surgery was accomplished only on 5 patients of the LLD group (elective laparoscopic sigmoidectomy) and 7 patients of the LHP group (colostomy takedown by laparoscopy). **Conclusions:** Laparoscopic lavage and drainage in safe in Hinchey II and III cases with an acceptable outcome and short hospital stay. Fecal peritonitis (Hinchey IV) continues to be a Hartmann's procedure indication; our preference is the laparoscopic approach to avoid the principal complication: wound infection and dehiscense.

FP-5

LAPAROSCOPIC ABDOMINAL TRANSANAL PROCTOSIGMOIDECTOMY WITH TOTAL MESORECTAL EXCISION TECHNIQUE AND COLO-ANAL ANASTOMOSIS

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Purpose: Preoperative high-dose radiation therapy for low rectal cancer has a downstaging effect, thus increasing the number of cases for the sphincter-preserving surgery, and reduces locoregional recurrences. In narrow space such as the pelvic cavity, laparoscopic approach has the advantage of obtaining a better operative field than the open method. This study describes our results in laparoscopic sphincter-preserving surgery for patients with low rectal cancer preoperatively treated with high-dose radiation therapy. **Methods:** From Feb. 1996 to Jul. 2001, 40 patients with low rectal cancer were enrolled in this study. There were 27 men and 13 women, and the mean age was 58.7 years (ranging from 34 to 78 years). All patients received preoperative radiation therapy alone or combined with chemotherapy and after 6 weeks of interval, they underwent laparoscopic surgery. The technique consisted of laparoscopic total mesorectal excision and after the exteriorization of the specimen through the anus, coloanal anastomosis was carried out trasanally (laparoscopic abdominal transanal proctosigmoidectomy with coloanal anastomosis, or LATA resection). The patients were followed up from 4 to 33 months after the surgery. **Results:** The mean operative time was 545 minutes and there was no conversion to open surgery. The mean size of the tumor 2.5 cm and the distal margin was from 0.5 to 5.5 cm. The mean lateral margin was 1.5 cm and the average number of lymph nodes harvested was 7.8 (ranging from 0 to 27). Major complications were observed in 4 patients (10%), including anastomotic structures in 3 patients and flexion stenosis in 1. Bowel movements returned in an average of 2.4 days, voiding difficulties were noted in 4 patients and 96% of male patients had a successful sexual intercourse in an average of 2 months. The function of the anal sphincter was very satisfactory in 50% relatively satisfactory in 41.7%, and frustrating in 2 patients that colostomy was required. Six patients (15%) recurred locally in 4 patients (10%) and distantly in 5 (12.5%). The 2-year and 5-year survival rates were 92.6% and 88.6%, respectively. The disease-free survival rate was 89.4% in 1 year and 81.7% in 5 years. **Conclusions:** LATA resection is a functional oncology surgery that preserves the anal, sexual and urinary functions, while conserving the abdominal wall integrity. However, a larger trial is warranted for a more definitive conclusion.

FP-6

MINIMALLY INVASIVE TREATMENT OF LEFT COLON CANCER OCCLUSION. ENDOLUMINAL ENDOSCOPIC WALLSTENT PLUS LAPAROSCOPIC COLECTOMY. PRELIMINARY RESULTS

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Treatment of left colon occlusion continues to be controversial. Conventional treatment includes Hartmann's procedure that entails a temporary stoma or more complex procedures (on table lavage or subtotal colectomy) to avoid an stoma. Autoexpandible endoprostheses may solve temporary the obstruction and subsequent laparoscopic colectomy permit a primary anastomosis, avoiding the emergency surgical procedure, stoma creation and reoperation, maintaining the advantages of a minimal invasive approach. **Aim:** To evaluate the preliminary results of a sequential endoscopic-laparoscopic treatment for malignant left colon occlusion. **Patients and methods:** From a prospective database recording laparoscopic colonic procedures we reviewed the patients diagnosed of left colon occlusion treated by a combination of endoscopic wallstent placement followed by laparoscopic colectomy. **Results:** Between March and October 2002, 7 patients diagnosed of left colon malignant occlusion were approached by this sequential stent-laparoscopy policy

Age	Sex	Localization	Days stent-Surgery	Op. T	Morbid	Overall stay
73	m	sigma	8	130	no	16
79	h	left colon	14	200	abscess	16
48	m	sigma	6	140	no	13
92	h	sigma	6	20	no	9
51	m	recto-sigma	9	170	no	14
64	m	left colon	6	210	no	12
56	m	left colon	5	300	no	11

Conclusion: Autoexpandible endoprosthesis permits to convert urgent surgery on elective for treatment of selected occlusive left colon neoplasia followed by the advantages of laparoscopic colectomy. Further prospective randomized trials are needed to evaluate the final advantage of this combined minimally invasive approach.

FP-7

LONG TERM SURVIVAL AFTER LAPAROSCOPIC RIGHT HEMICOLECTOMY FOR CANCER

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Hemicolectomy (particularly right-sided), which currently constitutes about 20% of all laparoscopic resections for colorectal carcinoma, is generally considered to be associated with more complications than operations on the sigmoid colon and rectum. Nevertheless, pathoanatomic abnormalities, such as the easily attainable mobility of the affected colon or the relatively simple externalization and anastomosis technique, have predisposed the laparoscopically assisted procedure of minimally invasive right hemicolectomy to become established as the elective standard therapy, comparable with sigmoid resection. Since surgical intervention in the colon, the classical domain of carcinoma surgery, underlies well established principles of radicality, this should also apply for the laparoscopic procedure. We present here results of long time survival after curative laparoscopic resection of right colon cancer. Since 1994 until 2003 we treated 60 patients with laparoscopic assisted right hemicolectomy. Mean operative time was 119 $\pm$ -38. Postoperative complications have been 18% with 3 bleedings, 3 wound infections and 2 ileus, 2 insufficiency anastomosis and surgical reinterventions. One

patient died. In long term results 5-year mortality fraction, obtained by Kaplan-Meier method was 65%. The analysis showed that mortality prognostic factors were positive lymph nodes and tumor stage. Cumulative proportion surviving for stage I (n = 17) 83%, stage II (n = 19) 75% and stage III (n = 15) 72%. It has been confirmed that the healing, long-term success and safety of the patient significantly correlates with the quality of the surgical operation. Our data suggest that long-term survival after laparoscopic right colon resection for cancer is similar or even better as survival after conventional surgery.

FP-8

LAPAROSCOPIC LOW ANTERIOR RESECTION

Puntambekar SP, Gurjar A, Sathe R, Kulkarni J.

Introduction: Low Anterior resection is a well established procedure for the treatment of cancer of lower rectum. Due to the availability of staplers total mesorectal excision can be achieved with preservation of the rectum very low down. The magnification offered in laparoscopic greatly facilitates this dissection and helps in achieving a very low anastomosis under vision. Thus in narrow pelvis the exposure as well as the vision is excellent with laparoscopy. **Methods:** We have performed 14 Laparoscopic LAR's in the last one year. We use 5 ports, two 10 mm and three 5 mm ports. The average surgical time is 150 minutes and none of the patients have needed blood transfusion. The abdominal dissection is completed laparoscopically and the rectum is transected 3 cm below the growth. The specimen is then removed through a small incision and the anvil of the stapler is inserted in the proximal colon which then pushed back in the abdomen. The EEA stapler is then inserted through the distal rectal stump and the anastomosis complied under laparoscopic vision. A covering transverse colostomy is then added if required. **Results:** There were 10 males and 4 females. All had adenocarcinoma of the rectum. All had Dukes B2 and None of the patients had nodal metastasis. The average time taken was 2.5 hours and the average blood loss was 100 mL. The average hospitalization was 4 days. No conversion was needed. Five patients needed opening of the colostomy. There was no mortality. **Conclusion:** We feel that for low rectal cancers laparoscopy achieves the same oncological clearance as that in open surgery but due to magnification facilitates more distal dissection and very low rectal anastomosis.

FP-9

LAPAROSCOPIC ROUX Y GASTRIC BYPASS IN THE DOMINICAN REPUBLIC

Gonzalez AR, Lebron H, Castillo A, Ramirez GW.

The Dominican Republic although a poor country, it has been reported that 19% of the population has metabolic syndrome. Pre operarative evaluation included: Laboratory, blood test, *Helicobacter pilory*, psychriatic, nutritional and cardiovasculary evaluation. We accepted for operation patients with 35% BMI plus comorbility and patient up 40% BMI without comorbility. We started to perform laparoscopy Gastric Bypass in june 2002. The technique evolved from retrocolic 2 layer hand sewing anastomosis to antecolic 1 layer hand sewing anastomosis. 36 patients have been done 29 female, 7 male, 16 to 58 years old 37% to 73% BMI. 10 patients had high blood pressure, 2 diabetic, 1 physical incapacitated, 15 has hypercholesterolemia. **Results:** 78% weight loss first year. Operative time 5 hours in the first cases down to 2 hours in the last cases. All patient with high blood pressure were out of medication. 2 diabetic are with no medication. The polio patient is capable again. **Complication:** 1 deep thrombophlebitis. Anastomosis obstruction 1 case immediate. 5 cases 1-2 months postoperative. **Reoperation:** 1 open: torsion of small bowel. 1 laparoscopic: bleeding port site. 2 gastrointestinal bleeding 2-4 months postoperative. 0 mortality. 0 leak. **Conclusion:** Laparoscopic Gastric Bypass is a safe and feasible operation should be done with propped training and preceptorship. All metabolic abnormalities were reverted.

FP-10

CALIBRATION OF THE GASTRIC LAP-BAND: THE ITALIAN EXPERIENCE

Di Lorenzo N, Favretti F, Furbetta F, Iuppa A, Doldi SB, Paganelli M, Basso N, Lucchese M, Zappa M, Lesti G, Angrisani L, Capizzi FD, Giardiello C, Paganini A, Di Cosmo L, Veneziani A, Lacitignola S, Silecchia G, Alkilani M, Forestieri P, Puglisi F, Gardinazzi A, Toppino M, Campanile F, Marzano B, Bernante P, Perrotta G, Coscarella G, Lorenzo M. Italian collaborative study group for LAP-BAND: GILB. Napoles ITALY.

Introduction: Surgery for morbid obesity is the emerging treatment of the new century (10-fold increase in the last decade). Due to the introduction of the adjustable lap-band, restrictive procedure can be tailored to the patient's needs to achieve a better weight loss, as far as to maintain the results. **Methods:** Data were obtained by the Italian collaborative study Group for Lap-Band® System (GILB) registry. An electronic patient's data sheet was specifically created. It was mailed and e-mailed to all the surgeons performing Laparoscopic Gastric Banding System operation in Italy according to indications from the local distributor (Inamed S.r.l.-Product Line Bioenterics). 3,632 patients were recruited since January 1996 still September 2003, and data from 2,812 were available for evaluation. Sex distribution (M/F 606/3,026), age 37.9 $\pm$ 11.8, range 15-74, BMI (44.2 $\pm$ 6.5, range 26.9-83.6), EW (kg 58.6 $\pm$ 19.5, 13-154) and% EW (94.8 $\pm$ 31.7, 16.4-305.1) were considered. P.O. mortality was 0.27% (10 pts). Most frequent complications were pouch dilation (4.7%), migration (1.8%) and tube/port problems (3.3%): most of the cases being present in the earlier period of the experience and decreasing with a new device and when a better technique, with anterior gastro-gastric stitches, was developed. A peculiar aspect of the lap-band is the possibility to adjust the stoma, either periodically or if a shop in the weight loss occurs. Inflation with saline can be performed under X-ray guidance (488/1,593, 31.4% in our experience) or by simple puncture. Out of the 2,812 pts, 1980 (70.4%) were present at follow up. 765 of them (38.6%) had a number of 1,593 calibrations (2.1 each), using a total of 0.5 to 5 cc of saline for each patient. In each single calibration no more than 2 cc were used (only cases of perigastric technique are discussed). In the early period (1996-2000), 179 pts were calibrated at operation: this option has been then abandoned. The timing of the first insufflation is greatly variable, but 884 out of the total of 1,593 (55%) occurred in the first year, and other 376 (23.6%) int the second, becoming occasional in the following 5 years (187-80-42-17). Complications of insufflation occurred in 12 (1.5%) patients: 9 pouch dilations, 2 erosions and 1 infection were reported as related to calibration, while in 19 cases a loss in the system was detected when insufflation was attempted. No correlation of erosion with insufflation was found: out of a total number of 69, only 5 had been calibrated (7%), thus suggesting to investigate on technical errors in dissection. Pouch dilation was observed in 162 pts, only 27 (16.6%) after calibration. When dealing with desufflation of the band (119 in 90 pts), we can note that 39 pts had a complication (as pouch dilation, erosion, infection, gastritis) that was solved by simply deflating the valve. In other 51 cases, the band was partially or totally deflated because the achieved excess weight loss was considered satisfactory by the surgeon and/or the patient. **Conclusions:** A versatile policy of calibration has been adopted in the Italian experience with Lapband: only 21% of the patients had a calibration at least once, as stated by the collected data. This did not result in a reduction of efficacy of the procedure: the % EWL is 54% at 5 years and 75.1% of patients present at follow up have a % EWL > 50. Regular follow up and rational use of calibration can lead optimise the results of this restrictive procedures.

FP-11

EVOLUTION OF SURGERY FOR MORBID OBESITY: FROM OPEN TO LAPAROSCOPIC ROUX-EN-Y-GASTRIC BYPASS

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Hypothesis: We hypothesized that: a) in an established Bariatric Center, the change from open Roux-en-Y gastric bypass (O-RYGB)

to laparoscopic Roux-en-Y gastric bypass (L-RYGB) is feasible and is not associated with an increased complication rate; b) L-RYGB is as effective as O-RYGB in weight loss and resolution of comorbid conditions. **Design and setting:** Retrospective study in an academic tertiary care center. **Patients:** Between December 1998 and November 2003, 350 patients (median aged 41 years, 303 women/47 men) who met NIH criteria for bariatric surgery underwent RYGB. The median preoperative body mass index (BMI) was 48 kg/m^2. Follow-up 13 ± 9 months in 232 patients (66%). **Main outcome measures:** Length of hospitalization, postoperative complications, Change in BMI, change in comorbid conditions. **Results:** Results are expressed as median value and P value < 0.05 is considered significant

	O-RYGB	L-RYGB	p-Value
Number of patients	184	166	
Operative time	193	193	NS
Length of stay (hours)	120	72	NS
% change BMI at 12 months	33	32	NS
Resolution comorbidities (% of pts)			
NIDDM	64	45	NS
GERD	87	75	NS
Hypertension	43	46	NS
OA/DJD	50	53	NS
Complications (%)			
Wound infection	14	3	p < 0.05
Ventral hernia	8	0	p < 0.05
Respiratory	8	0	p < 0.05
Anastomotic leak	1.6	0	NS

Conclusion: The results of this study show that: a) the change from O-RYGB to L-RYGB is feasible, however the learning curve is long; b) L-RYGB reduces the incidence of postoperative complications and c) L-RYGB is as effective as the O-RYGB.

FP-12

LAPAROSCOPIC VERSUS OPEN GASTRIC BYPASS, ONE-YEAR FOLLOW UP. CASE-CONTROL STUDY

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Purpose: Obesity is an important healthcare problem in Chile and the world. Laparoscopic gastric bypass (GBP) has been reported to be safe and effective approach for the treatment of morbid obesity. The authors performed a case and control study to compare surgical results of laparoscopic GBP with those of open GBP. **Methods:** From January to December 2002, 83 patients (case group) were underwent laparoscopic GBP. Patients were matched with who were subjected to open GBP (control group) in the same period according to age, sex, and body mass index (BMI). Main outcomes measures were operative time, length of hospital stay and operative complications. Body mass index (BMI) and excess weight loss (EWL) after 3, 6 and 12 months were obtained. Intention to treat analysis was used. **Results:** There were no deaths in either group. Mean operative time was longer for laparoscopic GBP than open GBP (139±44 minutes versus 107± 41 minutes, p < 0,0001). Conversion to open surgery was needed in 6 patients (7.2 percent). Median length of hospital stay was shorter for laparoscopic GBP patients (4.2 ± 4.8 days versus 7.1 ± 7.4 days, p = 0.004). Postoperative complications were observed in 6 (7.2 percent) and 11 (13.2 percent) patients in laparoscopic and open GBP respectively (NS). Reoperation was needed in 5 patients (6 percent) of laparoscopic GBP group and 2 patients (2.4 percent) of open GBP group (NS). BMI and EWL were similar at 3, 9 and 12 months (NS). **Conclusion:** Laparoscopic GBP is a safe alternative to open GBP and can be performed with morbidity rate comparable to those of the open technique. The main advantage of the laparoscopic approach appear to be a shorter hospital stay. EWL was similar at one year of follow up in open versus laparoscopic GBP.

FP-13

COMPARISON OF BMI-MATCHED PATIENTS UNDERGOING LAPAROSCOPIC ISOLATED VERTICAL SLEEVE GASTRECTOMY *VERSUS* THE LAPAROSCOPIC ROUX-EN-Y GASTRIC BYPASS

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Purpose: Superobese patients or those with significant cardiac/pulmonary disease may be at considerable operative risk for the "gold standard" Roux-en-Y gastric bypass (RGB). Performing an isolated laparoscopic vertical sleeve gastrectomy (VG) is a lower risk option. **Methods:** VG was performed in either superobese patients (BMI > 50 kg/m^2) or those of high operative risk (significant cardiac/pulmonary disease), Both VG and RGB are performed totally laparoscopically. By stapling along a 32 Fr bougie, a greater curvature gastrectomy is performed to create a 60-80 mL gastric tube. Bovine pericardium Peristrips® or bioabsorbable. Seamguards® were used to buttress the staple-line for diabetic patients. For the RGB, the distal anastomosis is fashioned using the double-stapled technique, creating a 75 cm biliopancreatic limb and a 100 cm antecolic Roux limb. The gastrojejunostomy is performed using a double-layered, hand-sewn technique. **Results:** Between Feb. 2002 and Oct. 2003, 20 VG and 140 RGB were performed. Of the 140 RGB, 34 of the RBG patients with BMI of > 50 kg/m^2 were compared to the more obese VG group. There were no readmissions, complications or deaths in the VG group.

VG	42.9 ± 10.5	360 ± 84	149 ± 15	58.1 ± 12.5	
RGB	42.2 ± 9.0	339 ± 42	146 ± 10	55.9 ± 6.2	
VG	96± 33	2.7± 0.8	0	0	0
RGB	157± 40*	3.7± 1.1*	7*	3	0
VG	17.1%	27.8%	40.2%	49.0%	61.9%
RGB	16.1%	24.8%	38.3%	50.3%	64.1%
VG	33 ± 9	50 ± 13	65 ± 20	83 ± 50	125 ± 35
RGB	32 ± 10	50 ± 14	66 ± 15	90 ± 12	133 ± 23

*P < 0.05

Conclusion: Superobese and high-risk patients are at significant risk for peri-and post-operative complications. The VG can achieve similar weight loss in the short-run with decreased risk and morbidity compared to the RGB.

V-14

LAPAROSCOPIC ROUX-EN Y GASTRIC BY-PASS, ANTEGASTRIC, ANTECOLIC, WITHOUT A RING

Penissi O, Romano J, Ortega CJ. Centro Policlínico Valencia (La Viña), UNIOBES, Valencia, Venezuela 2003.

The Roux- en-Y Gastric By -pass, is one of the most commonly performed operations for Morbid Obesity. The laparoscopic approach is increasing its popularity as specialized teams are training in the technique and obtaining good results. Many modifications to this technique have been described, mainly on the Gastro-Jejunostomy anastomosis. **Purpose:** Our video shows an original laparoscopic Roux-en-Y technique, performed antegastric, antecolic, without the placement of a ring in the gastric pouch. Five ports Versa Step were placed, according to modified Lloyd Davies position. **Methods:** The surgery begins at the inframesocolic are a with the localization of the Treitz Ligament, the Jejunum is divided at 50 cm with an EndoGIA 45-2.5, including 2.5 cm of the meso and 150 cm of

the distal Jejunum are counted. At this level is performed the intestinal anastomosis, latero/lateral with an EndoGia 45-2.5 and synthesis of the site of introduction of the instrument with intracorporeal suture, using an EndoSTICH, caliber 2/0. We proceeded to section the Omentum, in longitudinal sense, up to the transverse colon, with the Ligasure vessel sealing system. We continue the surgery in the supramesocolic area, sectioning and dividing the stomach, beginning between the first and second arch of the coronary artery, toward the Hiss angle, making a gastric pouch, with four linear staplers EndoGIA 60-3.5. The last step of the operation is the perform of the Roux-en-Y limb, antegastric, antecolic, with the gastric pouch and the distal Jejunum, with an EndoGIA 30-3.5, and closure of the site of introduction of the instrument, with intracorporeal suture, with the EndoSTICH, caliber 2/0. A intraoperatory gastroscopic is practiced, in order to check the pouch and the anastomosis. Concluding the surgery leaving a system of closed drainage. **Conclusions:** The Laparoscopic Roux-en-Y Gastric By-pass, antecolic, antegastric, without a ring, represents a good alternative, for the surgical treatment of the Morbid Obesity.

FP-15

MINIMIZING STRICTURES OF THE GASTROJEJUNOSTOMY IN LAPAROSCOPIC ROUX-EN-Y GASTRIC BYPASS

Seger M, Chastanet R, Dalgle C, Churchman R, Leggett P. University of Texas Health Sciences. Center at Houston. MIST.

Background: A great deal of interest has been devoted to the technical aspects of anastomosis construction in laparoscopic Roux-en-Y gastric bypass. Studies have reported results using hand sewn, circular stapled, and linear stapled and anastomotic techniques. Stricture rate of the gastrojejunostomy has ranged from 4.7% to 31%. Frequently these require endoscopy and dilation. The performance of these anastomosis is critical in that incomplete closure can lead to a potentially devastating leak. It is our belief that a linear stapled gastrojejunostomy with a single layer closure of the stapled enterotomy yields a minimal stricture rate without a higher leak rate. **Hypothesis:** Linear stapled gastrojejunostomy with hand- sewn single layer closure of the stapler enterotomy yields minimal strictures and does not lead to a higher leak rate. **Design:** Retrospective chart review. Results: 55 consecutive patients underwent a laparoscopic Roux-en-Y gastric bypass. All of that patients had a 35 mm linear stapled gastrojejunostomy with hand-sewn closure of the stapler enterotomy. Four out of the thirty-seven (10.8%) patients undergoing a two layer closure of the stapler enterotomy developed a stricture. There was one leak in this subgroup (2%). None of the eighteen patients who had a single layer closure of the stapler enterotomy developed a stricture or a leak. **Conclusions:** Closure of the stapler enterotomy is an important component of the anastomosis. Two layered closure of the stapler enterotomy leads to a higher stricture rate with no benefic in leak prevention.

FP-16

LAPAROSCOPIC ROUX-EN-Y GASTRIC BYPASS IN SAFE AND EFFECTIVE IN MASSIVELY SUPEROBESE PATIENTS

Farkas DT, Vemulapalli P, Lopes JM, Goodwin A, Gibbs KE, Teixeira JA.

Objective: Laparoscopic Roux-en-Y gastric bypass (LRYGBP) has been shown to be safe and effective. However, there is little data on the outcomes of massively superobese patients, with a body mass index (BMI $\geq$ 60. The goal of this study was to determine the safety and efficacy of LRYGBP in these patients. **Methods:** A total of 191 consecutive patients undergoing LRYGBP by a single surgeon at a university hospital were included in a prospective database. The patients were divided into two groups: the first with a BMI < 60 (n = 148) and the second with a BMI $\geq$ 60 (n = 43). The two groups were retrospectively compared in terms of the perioperative complications, as well as the excess body weight lost postoperatively. **Results:** Both groups were similar with respect to their age and preoperative comorbidities. The major and minor perioperative complications rates were comparable as well, with 8 (6%) and 4 (3%) respectively in the first group, and 3 (6%) and 1 (2%) respectively in the second group. Average excess body weight lost was calculated for each group at various postoperative intervals, and the data analyzed using Student's t-test.

Postoperative	BMI < 60		BMI $\geq$ 60		
Interval	n	% EBWL	N	% EBWL	p
3 months	106	33.9%	36	25.5%	< .001
6 months	60	50.5%	26	40.3%	< .001
12 months	31	63.6%	10	50.7%	< .001

Conclusions: LRYGBP is a safe operation in massively superobese patients with complication rates comparable to patients with a BMI < 60. The operation is effective in these patients as well. A satisfactory excess body weight loss was achieved, averaging over 50% at one year. However, this is less than weight loss seen in patients with a BMI less than 60.

FP-17

THE IMPACT OF OBESITY ON THECNICAL FEASIBILITY AND POSTOPERATIVE OUTCOMES OF LAPAROSCOPIC LEFT COLECTOMY

Leroy J, Rubino F, Ananian P, Claudon B, Vix M, Mutter D, Marescaux J.

Objective: It has been reported that obesity is associated with greater technical difficulty increased conversion rates and higher risk of postoperative complications in laparoscopic colectomy. The aim of this study was to consider the technical aspects and compare the outcome following laparoscopic left colectomy in obese and non-obese patients. **Methods:** All patients undergoing laparoscopic left colectomy between January 2001 and January 2003 were analyzed. Data collected included age, gender, BMI, American Society of Anesthesiologists score, diagnosis, operative technical parameters, operative time, conversion rate, type of pathology, length of hospital stay and complication rate up to 30 days postoperatively. Patients were divided into two groups according to their BMI, the cut-off being 30 kg/m^2. **Results:** A total of 111 patients were analyzed; 20.7% were obese, and 79.3% non-obese. The two groups were similar for demographics. There were no significant differences between the two groups with respect to intra-operative parameters, duration of the operation, resection margin, number of harvested lymph nodes and overall postoperative complication rates. There were no conversion to open surgery in the obese patients whereas 5 procedures in the non-obese group required conversion (p = ns). Obese patients had shorter hospital stay (7 ± 2.5 days *vs* 9.5 ± 7 days; p = 0.018). **Conclusion:** Our findings show that obesity does not have an adverse impact on the technical difficulty and postoperative outcomes for laparoscopic left colectomy. Our study supports the safety of laparoscopic colorectal surgery in obese patients.

FP-18

LAPAROSCOPIC GASTRIC BYPASS. PRELIMINARY EXPERIENCE

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Introduction: Laparoscopic adjustable gastric banding has gained wide popularity in CE due to its minimally invasiveness. However, real information about long term results is limited. Our obesity unit at Clinic Hospital decide to start treating morbid obese patients with a more standard procedure: laparoscopic gastric bypass (LGBP). **AIM:** To study the results of morbid obese patients treated by LGBP at the obese unit in Barcelona. **Methods:** From

September 1999 to October 2003 all patients with morbid obese criteria were evaluated to enter a surgery program treatment. **Results:** During this period, 239 patients underwent a LGBP. Mean age was 40.4 years (16-67). The average body mass index was 47.7 kg/m^2 (range 32-72.5). Thirty two percent of the patients had previous abdominal surgery. Conversion to open surgery was nil. In five patients we used hand-assisted technique (2 at the beginning of the technique and 3 due to the impossibility to flat the stapler anvil). Median operative time was 120 minutes (range: 60 to 285). Morbidity was 16%: 1 evisceration through stapler trocar (reoperated), 2 anastomotic leakage (medical treatment), 2 intra-abdominal abscess, 10 intraluminal haemorrhages and 8 trocar wound infections. Mortality was 0.4%. Twelve patients developed late complications: 10 anastomotic strictures, 1 gastric ulcer, 1 gastro-gastric fistulae after 1 year follow-up. Whit a median follow-up of 19 months (range 0-48 months), the median excessive weight loss after 3, 6, 12 months was 37.5%, 53.3%, 64.4% respectively. **Conclusion:** The preliminary results of LGBP of our unit support the idea of the use of this technique as gold standard even in Europe.

FP-19

ADJUSTABLE GASTRIC BAND -833 PATIENTS, 3 YEARS SERIES

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Background: In occidental world the obesity is growing at levels of 60% of the population. Between 3 to 6% are morbid obese and are referred to surgical treatment. The Adjustable Gastric B is the surgical option with less mortality and few complications Aim: Evaluate the results and efficiency of gastric band in a series of patients Casuistic: Between November of 1999 e July of 2003 (82% of patients in follow-up), 833p were operated with Gastric Band and analyzed in a retrospective manner, 499 were female (59.9%), age between 12 to 72y (M = 34.5y), weight 88 to 257 kg (M = 127 kg) and BMI 35 to 79 kg/m^2 (M = 45.4 kg/m^2). The surgical technique was the pars flacida approach in 85.5% (SAGB-Obtech®). **Results:** The mean BMI came from 45.4 to 30.1 kg/m^2. Operative time range from 26 to 195 min (M = 47 min), Time in Hospital were below 12h in 82%. Complication was 1.8% of "slippagge", 1.2% of porth troubles, 0.24% de "acalasia like syndrome", 0,6% de food impactation, 0.85% de intragastric band migration e 0.12% of pulmonary embolism. Unsatisfactory weight loss happens in 12%. Re-operation was done in 37p (4.4%), 15p with slippage, 11p with unsatisfactory weight loss, 6p with porth troubles and 5p with band migration. There were no deaths in this series. **Conclusion:** Adjustable Gastric Band shows in a trees year period that can be a safe and efficiency option in treating morbid obese patients.

V-20

ENDOSCOPIC CHOLECYSTECTOMY AND HISTERECTOMY PERFORMED WITH ONLY ONE PORT

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In the traditional surgery it is well known that 2 greater surgical procedures must not be performed at the same surgical time, as a great tissue trauma can favor some complication. With the coming of the laparoscopic surgery some paradigms of the traditional surgery are broken. Now it is accepted to operate a patient of antireflux surgery and cholecystectomy at the same surgical time, since both surgical pathologies have the same access route and when operating the patient of antireflux surgery, only one or two extra ports are required to make the cholecystectomy. In our experience with the technique of surgery without a trace or a single umbilical port, different procedures can be made such as: cholecystectomy, appendectomy, inguinal herniorrhaphy, hysterectomy, ovarian cystectomy. This video shows the solving of a case: a 40 year old female patient, with diagnosis of uterine myomas and gallbladder lithiasis in whom cholecystectomy and hysterectomy were made with only one umbilical port, with a surgical time of 120 minutes, with excellent aesthetic and functional results. The purpose of this study is to prove that two mini invasive techniques can be performed at the same surgical time with minor trauma compared with traditional laparoscopy and traditional open surgery. Concluding that in selected cases it is possible to carry out 2 laparoscopic procedures at the same surgical time when there is experience in this type of techniques, although it is recommendable to increase the casuistic.

FP-21

MANAGEMENT OF IMPACTED BILE DUCT STONES ENCOUNTERED DURING LAPAROSCOPIC BILE DUCT EXPLORATION (LCBDE)

Nassar A, Hamouda A, Mahmud S, Khan M, Ilham M.

Background: Impacted bile duct stones (IBDS) increase the difficulty, operative time, cost and the potential for morbidity, failure or conversion of LCBDE. **Aims and methods:** Prospective data from 220 LCBDE s was reviewed to identify possible risk factors and evaluate the operative technique and outcome on a unit adopting laparoscopic treatment for all suspected choledocholithiasis. Stones were considered impacted if found adherent or had a greater diameter than the CBD and required repeated manipulation or failed to be dislodged. Results: 220 LCBDE s were performed by one surgeon over 9 years. Twenty four patients had impacted stones as defined (11%) 16 were females. The median age was 62 years (29-85). All but 3 were emergency admissions and 20 were jaundiced. The ultrasound scan showed dilated ducts in all with stones in ten. MRCP showed stones in four. ERCP was attempted in an 85 year old with multiple previous surgery and an aortic aneurysm but failed (2.5 cm stone in mid-CBD). cholangiography showed multiple stones in all but six patients. On exploration only 10 had more than one impacted stone. Transcystic exploration was attempted in six patients and was successful in four. choledochotomy was successful in 14 of 20 patients (70%). Open conversion was necessary in 6 cases (25%) and failure of stone removal necessitated Bypass procedures in 3. The median operation time was 4 hours 45 minutes (2 h 30 min- 5 h 45 min). The mean hospital stay was 7 days (4-16). There was no major morbidity or reoperation but one ERCP was required to remove 2 retained stones in one patient. **Conclusion:** The presence of risk factors for IBDS (recurrent jaundice and CBDS stones on ultrasound) may help plan treatment strategies and optimize operative lists. The operative technique needs to be tailored to individual cases and the conversion rate will remain high. However, LCBDE remains our method of choice as impacted stones are recognized causes of ERCP complications and failure. Video clips will be used to demonstrate the difficulties and successful methods of dealing with IBDS.

FP-22

LAPAROSCOPICAL MANAGEMENT OF CHOLEDOCAL CYST IN CHILDREN. EXPERIENCE AT THE HOSPITAL INFANTIL DE MEXICO "FEDERICO GOMEZ"

Nieto J, Ondorica R, Bracho E, Carmona R.

Purpose: Show off the experience in laparoscopical management of choledocal cyst in children at our hospital. **Methods:** Children admitted from april 1999 to february 2002 with the diagnosis of choledocal cyst, type I, with USG diagnosis prior to surgery at our third level hospital. **Results:** Seven patients admitted went thru laparoscopical correction, age from 4 months to 7 years, all female, diagnostic was made by clinic manifestation and corroborated with US. We used 3 to 4 ports, dissection and resection of the choledoc cyst, and anastomosed the billiard tree to a Y de Roux made with dermabond 000, the evolution was good. We had 1 anastomosis dehiscence and 1 bowel occlusion. In 5 there were bile leakage, and 2 cholangitis. Follow up was from 1 month thru 3 years. **Conclusions:** Even technical is complicated to perform the surgery. It is possible and also to have good results, the operative time is still prolonged but the patients had good evolution.

FP-23

A LOW CONVERSION RATE WITH ONE-SESSION MANAGEMENT OF ALL-COMERS WITH BILIARY CALCULI

Hamouda AH, Khan M, Ilham M, Mahmud S, Nassar AHM.

Background: Conversion rates of 1.5-5% for laparoscopic cholecystectomy (LC) and 6-17% for laparoscopic bile duct explorations (LBDE) have been reported. Most series had exclusions or used ERCP for choledocholithiasis. We aim to audit conversions in a unit adopting single-session laparoscopic management of biliary calculi, including biliary emergencies, without preoperative ERCP. **Patients and methods:** We audited 900 patients over 6 years. LC and cholangiography was the standard treatment followed by LBDE if necessary. Results: Ten procedures (10/900) were converted (1.1%) with male to female ratio of 4.6 and mean age 63 years. Nine were emergency admissions (8 with jaundice, 1 with acute cholecystitis). Two (0.28%) were converted during LC alone, due to severe adhesions or inflammatory mass. Seven conversions were in patients who had ductal exploration. These were due to dense adhesions preventing access to the pedicle in four cases (converted before commencing ductal exploration), conversion due to failed laparoscopic exploration in two (removal of impacted stones failed even after conversion) and failed induction of pneumoperitoneum in one patient due to compact body build. Anatomical difficulties ranged from dense adhesions to Mirizzi syndrome (2 patients), and cholecysto-duodenal fistula (1 patient). One conversion was necessary to release small intestine densely adherent at umbilicus to facilitate closure after successful ductal exploration. The mean operative time was 214 minutes. There were no operative complications. Postoperatively, one patient had a chest infection, and 2 had retained stones, subsequently removed by ERCP. The mean hospital stay was 13.5 days. Single-session management was successful in all, except 3 requiring postoperative ERCP, of whom one was re-admitted with cholangitis. **Conclusion:** A low conversion rate laparoscopic management of biliary stones in all-comers is possible. The majority of conversions occurred with ductal stones. Only two were due to failed laparoscopic explorations. No conversion was forced by operative complications.

FP-24

SELECTIVE USE OF HAND-ASSISTING LAPAROSCOPIC LIVER RESECTION AND CHOLEDOCHODUODENOSTOMY DRAINAGE IN THE MANAGEMENT OF RECURRENT PYOGENIC CHOLANGITIS

Tang CN, Siu WT, Chau CH, Ha JPY, Chan K, Tai CK, Li MKW.

Background: Frequent cholangitic attack is the hallmark of recurrent pyogenic cholangitis (RPC). The standard treatment approach is stone lithotripsy, combined with either bilio-enteric drainage or liver resection if there is evidence of parenchymal atrophy. **Aim:** This study is to review our selective approach of either hand-assisting laparoscopic liver resection or choledochoduodenostomy drainage in patients with RPC. **Patients and methods:** Patients with RPC and with evidence of segmental liver atrophy and multiple intrahepatic ductal stones located in the left lateral segment were selected for hand-assisted laparoscopic segmentectomy (HALS). The operation was carried out using hand-assisting technique with the stone-harbouring segment resected laparoscopically using “laparoscopic hand”, ultrasonic shear and ultrasonic surgical aspirator. Patients were excluded if there were (1) evidence of malignant transformation, (2) bilateral intrahepatic ductal stone and (3) stone located in postero-superior segments. On the contrary, if the recurrent stones were mainly located in extrahepatic ducts, total laparoscopic choledochoduodenostomy (LCD) would be considered. The anastomosis was performed in side-to-side fashion using single layer monofilament suture. Previous biliary surgery was not considered as contraindication for the operation. Both groups of patients were followed up with regular liver function test and imaging study if required. **Results:** There were 25 patients recruited in our study. Nine of them had the HALS, whereas LCD was performed in 16 patients. Among them, two patients with combined LCD and HALS in the same operation. There were 7 male and 18 female, mean age was 60.5 (29-79). Open conversion was required in two patients due to bleeding from left hepatic vein and lost broken tip of ultrasonic dissector. The mean operating time was 176 minutes (90-290 minutes). Mean postoperative stay was 11.2 days (5-60 days). There were 2 patients developed postoperative bile leak whom recovered with combined endoscopic and percutaneous drainage. The remaining 23 patients recovered uneventfully and had no cholangitic attack upon a mean follow-up of 33 months. **Conclusion:** The introduction of laparoscopic surgery not only revolutionized the management western choledocholithiasis, the management of oriental choledocholithiasis was also markedly changed. Skill refinement and improvement of ancillary technology might further improve the results.

FP-25

FURTHER SUPPORT FOR ROUTINE OPERATIVE CHOLANGIOGRAM IN LAPAROSCOPIC CHOLECYSTECTOMY

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Purpose: The place of cholangiography in laparoscopic cholecystectomy (LC) remains debatable with wide variation in practice between surgical institutions and individual surgeons. The aim of this study was to evaluate the outcome of performing routine *versus* selective operative cholangiograms in patients undergoing elective LC. **Methods:** The data of 503 patients undergoing LC were compiled and analyzed. The results of routine operative cholangiograms performed in 324 patients undergoing elective LC from October 1996 to September 1998 were compared with the results of selective operative cholangiograms in 179 patients undergoing LC from Jan 2000 to Jul 2003. Selective use of operative cholangiogram was enforced during the latter period due the use of an alternative peripheral operating facility while the main theatre complex was undergoing renovations. **Results:** Laparoscopic operative cholangiogram was successful in 320 cases when performed routinely. Biliary ductal stones were evident in 12 patients (3.8%) none of who were referred for preoperative endoscopic retrograde cholangiopancreatography (ERCP). Laparoscopic bile duct exploration was performed in 8 of the patients and open ductal exploration was performed in the remaining 4 patients. In the selective operative cholangiogram group, laparoscopic operative cholangiogram was performed in 14 of the 179 patients (7.8%). Two patients (1.2%) who did not have an operative cholangiogram developed symptomatic residual biliary ductal stones on follow-up. There were no cases of bile duct injuries attributable to routine laparoscopic operative cholangiogram in contradistinction to 2 cases (1.1%) in the selective group. In one of the latter cases, an operative cholangiogram was only performed when a bile duct injury was suspected. **Conclusions:** Even though performing routine laparoscopic operative cholangiogram can be considered as being time consuming and costly, it would seem to play an important role in reducing the possible morbidity that may arise from residual bile duct stones and more importantly, in preventing iatrogenic bile duct injuries.

FP-26

NEEDLESCOPIC CHOLECYSTECTOMY: THE TEXAS ENDOSURGERY EXPERIENCE

Jaramillo EJ, Franklin ME, Glass JL, Berghoff KR, Treviño JM.

Purpose: To present an analysis of our experience with cholecystectomy using miniaturized instruments of 2 mm diameter (needlescopic cholecystectomy). **Methods:** From 1996 to 2003, 285 patients with gallbladder disease underwent needlescopic cholecystectomy. All patients were operated with a standard fourport technique using 3-mm trocars and 2-mm instruments and a 10-mm laparoscope through the umbilicus. The cystic duct and artery were secured by 10-mm clips passed through the umbilicus visualized by a 2-mm laparoscope. The characteristics of patients, total operation time, complications, postoperative pain and hospital course

were documented. **Results:** Average age of patients was 41.86 years (14-82). Two hundred and forty six patients were female (86.31%) and 39 patients were male (13.68%). Mean BMI was 25.7 (16.3-39.2). Three cases were emergent (1.05%, diagnoses of acute cholecystitis). Mean length of surgery was 59.33 min (30-200 min). Intraoperative cholangiogram were done in all cases. Mean blood loss was 14.88 cc (0-50 cc). One patient had an intraoperatory complication (adverted partial section of the right hepatic duct, it was repaired with simple 5-0 Vicryl stitch and an endobiliary stent was placed), this was the only case that was converted to conventional LC (conversion rate to LC 0.35%). Mean hospital stay was 22.68 h (18-27). Postoperative pain was ranged according to a pain scale of 0-10: in the day of operation the mean was 4.4 (range 0-10) and for the first day postoperatively was 1.7 (range 0-10). The number of analgesic doses required was 0 doses in 6.89% of patients, 1 dose in 20.68% of cases, 2 doses in 24.13%, 3 doses in 34.48%, 4 doses in 13.79% and 5 or more doses were not required. There were not in-hospital complications. **Conclusions:** Needlescopic cholecystectomy can be performed safely and expediently with no increased risk for the majority of patients.

V- 27

LAPAROSCOPIC INTRAOPERATIVE ECHOCHOLANGIOGRAPHY
Salinas G, Saavedra L, Valdivia BC, Angulo H, Tamayo JC, Rodríguez W, Ramírez E, Orellana A. Endoscopia Quirúrgica-Lima-Perú.

Purpose: Laparoscopic intraoperative ultrasound of the biliary tract is our first option instead of the traditional cholangiography. BMode is the way we obtain the images but with real time and the use of air as a contrast we can show the adequate passage of the fluid to the duodenum through the papilla. **Methods:** We use a 7.5 Mhz laparoscopic rigid probe through left lateral subcostal 10 mm trocar, the bile duct is identified from the head of the pancreas to the porta hepatic, we canulate the cystic duct and using normal saline and air as a contrast we flushed the bile duct. The probe is advance from the liver to the head of the pancreas where the papilla is identified. The anatomy and the passage of the fluid is clearly seen. **Results:** In some patients we have seen clearly the passage of the fluid from the bile duct to the duodenum, we have also seen small stones moving from the bile duct to the duodenum while the flushing technique is been used. **Conclusions:** The laparoscopic intraoperative ultrasound can be used not only to identify the anatomy and possible stones but with the used of fluid and air as a contrast (echocholangiography) more information can be obtained in the evaluation of the common bile duct. The video shows the fluid passing through papilla.

FP-28

MINIMALLY INVASIVE SURGERY IN THE NECK. HAVE WE CROSSED ANOTHER FRONTIER?
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Purpose: To present the experience of our group with the surgical treatment of some diseases in the neck, Zenkers' diverticulum (ZD), Parathyroid single adenoma (PA), and 34 patients in which we did a percutaneous dilatational tracheostomy (PDT). **Methods:** We treated one male patient (gastroenterologist) 82 years old that had a large ZD with severe cricopharyngeal m. Spasm and severe dysphagia, we used the intraoral route to make what we called an endomiotomy using a laparoscopic stapler. Four patients with hiperparathyroidism and a PA identified by a sestamibi nuclear scan and ultrasound were operated; 2 had a totally endoscopic parathyroidectomy and the other 2 had a radioguided open parathyroidectomy through a 2.5 cm skin incision. A total of 34 PDT were done, all with fiberoptic bronchoscopic guidance, the patients had diverse pathologic states that either required prolonged mechanical ventilation or continuous aspiration of tracheobronchial secretions. **Results:** The patient with ZD and cricopharyngeal dysfunction had a complete relief of dysphagia and a significant reduction a of the diverticulum. All four patients with PA were cured; in these patients one had a recurrent laryngeal nerve palsy that resolved in 4 months foniatric therapy, this patient also had a partial pneumothorax during the procedure that was treated with a Veress needle and PEEP. Of the 34 patients that had a PDT we had two complications; one was bleeding of the pars flacida that resolved spontaneously during the procedure, and the other was a dislodgement of the canula. None of the patients had a longer stay in the ICU, nor died as a consequence of these complications. **Conclusions:** The surgical pathology that can be found in the neck has received the benefit of MIS. Although the transoral treatment of ZD and PDT techniques have been used since the 80's it has been within the last 10 years that with the availability of laparoscopic instruments and a wider knowledge of the PDT and a wider use of endoscopy by the General Surgeon and other specialists that the application of these procedures has expanded. The new imaging modalities for PA preoperative localization have allowed to do a less aggressive and highly accurate parathyroid surgery. This is important considering that many of the patients with PA are woman. This might also make that more female patients could accept surgical treatment for "asymptomatic" parathyroid adenomas that are diagnosed when studying patients with an abnormal bone density measurement.

V-29

SMALL BOWEL INTUSSUSCEPTION AND LAPAROSCOPIC APPROACH IN THE ADULT
Targarona EM, Alonso V, García A, Balagué C, Kobus C, Pey A, Gaya JM, Medrano R, Davins M, Garriga J, Trias M. Service of Surgery, Hospital de Sant Pau, UAB, Barcelona, Spain.

Intussusceptions is the term to define the spontaneous telescoping of a segment of the bowel. It is an infrequently diagnosed in the adult, and present with a different type of symptoms, mainly obstructive. Laparoscopic approach may be interesting for diagnosis and therapeutic purposes. Up to now, there few cases of adult intussusceptions managed by laparoscopy. **Case:** A 72 years old women that was admitted by abdominal distention and digestive bleeding. Upper and lower endoscopy were normal, and US and CT scan showed a dilated small bowel loop and a mass, with suspicion of intussusceptions. Laparoscopic resection was performed with complete intrabdominal resection and anastomosis. Histology showed a low grade mesenquimal tumor. **Conclusion:** Laparoscopic approach may be used for diagnosis and therapeutic intention in cases of intussusceptions in the adult.

V-30

COMPLICATED AND UNCOMPLICATED MECKEL'S DIVERTICULUM TREATED BY LAPAROSCOPY. REPORT OF 3 CASES
Güereque E, Mendoza-Marques J.

Purpose: To demonstrate the effectiveness and safetyness of the laparoscopic approach for the removal of Meckel's diverticulum. **Case 1:** (Littre Hernia) Male 43 years with acute onset of right inguinal region pain. At exploration, a painful mass non-reducible is found. A pre-peritoneal approach demonstrates a indirect inguinal hernia with an ischemic tubular structure strangled. The internal inguinal ring is sectioned and the structure is; reduced to the abdominal cavity. The trocars are re-positioned and an intra-abdominal approach is made. An ischemic Meckel's diverticulum is identified. It is removed with an Endo Gia 45 (Auto Suture USCC) once it is asserted that the intestinal lumen is normal and no leaks are found. The hernia was repaired by the trans-peritoneal technique. **Case 2:** Female 38 years, with an acute abdominal syndrome of 6 hours onset. At laparoscopy, dilated bowel loops are observed and a Volvulus of an Ileon loop is identified. As the Volvulus is rotated, the fixing point results to be an inflamed Meckel's Diverticulum. Once the Volvulus is resolved and no intestinal ischemia is observed, the Diverticulum is removed with an Endo Gia 45. **Case 3:** 52 year old male underwent a Cholecystectomy for gallstones cholecystitis. During the procedure a

Meckel's Diverticulum is detected and removed with an Endo Gia 45. **Results:** There were no complications. The operative time averaged 92 minutes and the hospital was 2.2 days. **Conclusions:** It is safe to remove Meckel's Diverticulum with a stapling device and a laparoscopic approach. Also, this approach is useful to treat concomitant complications.

V-31

A PERFORATED AND SCALED MECKEL'S DIVERTICULA TREATED SUCCESSFULLY BY LAPAROSCOPIC APPROACH

Mussan G, Cohen S, Flores I, Ramírez C, Valdés J, Mervitch N.

We present the case of a 27 year old male, who was admitted with severe abdominal pain, mainly in the lower left quadrant, no peritoneal signs were present, the WBC were 17,000 leukocytes. The abdominal plain films wereunspecific for perforation or peritoneal signs, the CT scan was negative for free fluid, diverticulitis or appendicitis. The patient was observed and treated for 12 hours with rehydratation. A new WBC showed 22,000 leukocytes. A diagnostic laparoscopy was performed, it showed a normal appendix, purulent fluid, and a perforated and scaled Meckel's diverticula were found at 55 cm from the ileocecal valve. Previous identification and dissection of the diverticula, a wedge resection was performed too. The patient recovered without any complication and was discharged on the second postoperative day. This video shows the feasibility of the laparoscopic approach in Meckel's diverticula.

FP-32

LAPAROSCOPIC MANAGEMENT OF GIANT OVARY CYST

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Background: Despite technical improvements, preoperative imaging studies often fail to predict intraoperative findings. We investigated the potential use of the diagnostic ultrasonography and abdominal computed tomography for the assessment of disease in patients with giant ovary cyst with CA 125 in the normal limited, unilateral cyst, of the surface of intracystic not solid components and shows cyst serous, not important the age of the patients. **Objectives:** We present the experience in management of giant ovary cyst. **Material and methods:** Between January 2002 and July 2003, Nine-six consecutive patients with ovary cyst were identified as suitable candidates for laparoscopic excision. All patients were treated successfully using minimally invasive techniques, the any age and size the ovary cyst. **Results:** With age the 17 to 78 years, with sizes ranking from 12 to 30 cm as measured during ultrasound and computed tomography examination, in which complete evacuation percutany the ovary cyst, all patients underwent surgery in the Trendelenburg position under general anesthesia. A 10-mm supraumbilical port of entry for the camera was made alter pneumoperitoneum was established using a Veress leedle. In general, four trocars were placed: supraumbilical, a suprapubic, and two lateral trocars. The histology of the cyst was cystoadenomas in all. Without any complications. **Conclusions:** Laparoscopic of ovary cyst has long history of use and is clearly identified as a significant surgical advance. The outcomes and benefits for patients are well defined. At this time, the laparoscopic approach should be considerated preferable for patients who require ovary cyst surgery if no contraindications preclude its use.

FP-33

FIRST EXPERIENCE IN ROBOTIC SURGERY IN CHILDREN IN MEXICO

Nieto J, Ondorica R, Silva E, Bracho E.

Background: Laparoscopic surgery using the robotic system Zeus® was recently introduced into surgical practice for adult patients. To investigate the feasibility of this system in pediatric surgery, laparoscopic fundoplication (Nissen) pyloroplasty, and gastrostomy were performed. **Methods:** We have reported the first seven robotic pediatric operations in Mexico with the Zeus system (two-dimensional vision system). In six children this was for the correction of gastroesophageal reflux; five were neurologically impaired patients, and the other one underwent the correction of and esophageal atresia as a newborn and later on developed a stricture at level of the anastomotic repair due to gastroesophageal reflux. Another child underwent laparoscopic correction of a diaphragmatic retrosternal hernia. **Results:** The mean operating time for fundoplication was 146 min (range, 105-180 min), the operating times for pyloroplasty were 30 min, and that for primary closure of the diaphragmatic hernia was 60 min. No complications were registered during either the robotic procedures or the postoperative courses. **Conclusions:** Compared to conventional laparoscopy, the high-quality vision, advanced instrument movement, and improved ergonomic position of the surgeon appear to enhance surgical precision. We face the challenge of performing three procedures in three different internal sites while maintaining the same access ports.

V-34

ROBOTIC EXPERIENCE IN GENERAL SURGERY PRIVATE PRACTICE

Güereque E, Mendoza-Márquez J.

Purpose: To demonstrate the effectiveness of a robotic arm in the performance of laparoscopic surgical procedures on a daily basis. **Material and method:** From January 2003 to August 2003, 56 patients underwent diverse laparoscopic surgical procedures. These individuals were not part of a special protocol, and the pre-operative evaluation was the standard pre-op evaluation used at our institution (WBC, SMA, EGO, HIV, EKG, Chest X-Ray and Cardiology Consultation). A robotic arm AESOP 3000 (Computer Motion) voice activated was used for the handling of the laparoscopy scope, in all cases. The procedures performed were: cholecystectomy, histerectomy, Nissen, appendectomy, ovarian cysts removal, abdominal wall hernias repair (post-surgical and large umbilical), inguinal hernias (pre-peritoneal and trans-peritoneal approach). **Results:** The ages oscillated from 8-74 years with an average of 41. The operative time fluctuated from 25-105 minutes with a median of 57. (This is 10 minutes above our average time in general laparoscopic procedures). There was no mortality and no morbidity. **Conclusions:** The addition of a robotic arm for the performance of laparoscopic surgical procedures on the daily basis cases is useful and very safe (once you have completed a formal training).

FP-35

ENDOSCOPIC THYROIDECTOMY: CASUISTIC

Alvarez GC, Faria EN, Carnieletto MDH, Pansard RB, Schmitz MD, David F.

Background/Aims: Endoscopic thyroidectomy is one of the most controversial endoscopic procedures. However it is gaining wide acceptance as a safe and effective alternative in the treatment of thyorid pathology. The purpose of this study is to show the safety, feasibility and success rate of this endoscopic method to dry up surgical findings up to 8 cm without having aesthetic damage. **Methodology:** A study comprising 126 consecutive patients who underwent to endoscopic thyroidectomy for benign and malignant thyroid pathology were prospectively reviewed from September/98 to October/03. Matched for age, gender, nodule size, type of surgery, conversion, perioperative complications, operative time, mortality, discharge and pathology findings. Uses a technique variation, with a main port of 1 cm transverse incisions made ont the supraesternal notch and two ports of 5 mm on the medial edge of the esternocleidomastoid muscle, 1 cm and 2 cm above the clavicle. CO_2 used to create the space, scissors and clips or harmonic scalpel was used to perform the resection. **Results:** The age ranged from 13-80 (mean 35.2). The nodule sizes ranged from 0.8 to 8 cm [mean 3.71 cm]. The surgical procedures were left lobec-

tomy 50 (39.7%), right lobectomy 50 (39.7%), bilateral partial thyroidectomy in 15 (11.9%), isthmectomy in 3 (2.38%) and total thyroidectomy 11 (8.73%). The operation time ranged form 60 to 300 minutes [mean 150 minutes]. There were 7 minor complications [5.55%], conversion 2 (1.6%). The mortality rate was zero. The specimen size ranged from 2 to 8 cm [mean 4.85 cm]. All patients were discharged on 1st postoperative day, except 3 patients on 2nd postoperative day. The pathology findings were colloid goiter 72 (57.1%), follicular adenoma 32 (25.4%), lymphocytic thyroiditis 3 (2.4%), papillary carcinoma (15%). **Conclusion:** This technique demonstrates one more surgical alternative to treat benign thyroid pathology with size up to 8 cm, includes bilateral procedures, with conversion, morbidity and low discharge. The great advantage is an excellent aesthetic result.

FP-36

NOVEL GASLESS VIDEO-ASSISTED THYROIDECTOMY VIA THE AXILLARY APPROACH USING THE LIFTING METHOD

Kayano K, Mizutani H, Miyazaki I, Nishioka S.

We have developed video-assisted thyroidectomy via the axillary approach using the lifting method without carbon dioxide. In this study, we evaluate the efficacy of this procedure with regard to surgical factors and patients' complains after operation, which is compared with those of two other video-assisted thyroidectomy and the conventional open procedure. **Methods:** Our new procedure in 3 patients is called type 1 in this paper. The patient was placed in a supine position with the neck extended and the arm on the tumor side was raised over the forehead to expose the axilla. A 40 mm vertical skin incision was made in the axilla, another 5 mm incision in the anterior chest for the videoscope. After the subcutaneous tissue was dissected from the axilla to the neck, the neck and anterior chest skin is lifted up by 1.2 or 1.5 mm Kirschner-wire to make the working space. Thyroidectomy was performed through the axillary incision using an ultrasonic scalpel. One drain was placed in the 5 mm incision. On the other hand, video-assisted thyroidectomy via the anterior chest approach using the lifting method in 8 patients is called type 2. Video-assisted thyroidectomy via the anterior chest approach from the breast using the vein harvest device in 1 patient is called type 3. The conventional open surgery in 8 patients is called type 4. **Results:** No scars in the neck and the chest were left in type 1, the visible scars in type 2-4. Benign and hemilateral tumors sized to less than 5 cm (mean 2.9 $\pm$ 1.0 cm, 3.1 $\pm$ 0.6 cm, 2.0 cm, respectively) were treated in type 1-3. The duration of operation in type 1-3 (mean 180 $\pm$ 17 min, 183 $\pm$ 19 min, 150 min, respectively) is significantly longer than that in type 4 (mean 119 $\pm$ 8 min). The recurrent nerve palsy was noted in two cases (one of type 1, one of type 2). **Conclusion:** Our novel procedure can make completely hidden scars to yield most excellent cosmetic results. All patients are pleased with them. However, the duration of video-assisted operation is longer than that of open surgery and the temporary palsy of the recurrent laryngeal nerve is sometimes occurred. It will be possible to solve these problems by more exercise.

FP-37

VIDEO ASSISTED THYROIDECTOMY. INITIAL EXPERIENCE IN MEXICO

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Background: Video-assisted surgery of the neck has been evolving as a new technique around the world and it is still controversial. Little experience is known in developing countries. **Methods:** We studied prospectively patients selected for video assisted thyroid surgery from February 2001 to September 2003. Patients with a solitary thyroid nodule less than 3 cm in diameter, without previous neck surgery and or malignancy were considered suitable for the study. The surgical technique used, was described by Miccoli, using a gasless approach and a single incision in the neck. All patients were studied with ultrasound to measure thyroid volume and fine needle aspiration biopsy to rule out malignancy. **Results:** In this period of time seventeen patients (14 female and 2 male) were selected for video-assisted thyroidectomy. Age ranged from 13-64 years (median 40.3 years). Median nodule size was 31 mm (18-50 mm). Skin incision ranged from 12-28 mm (m 18 mm). All surgical procedures were unilateral (hemithyroidectomy with isthmus). In three patients (23.5%) the neck incision had to be extended. We did not observe laryngeal nerve paralysis or transient hipocalcemia in this series. No other complications were observed. **Conclusions:** Video assisted thyroidectomy with a gasless approach is a feasible technique, with low morbidity and good short term outcome. Strict selection criteria must be used and it should be developed only in centers with experience in endocrine and advance endoscopic surgery. This is a small series of patients and further experience must be completed.

V-38

NEW TECHNIQUE OF ENDOSCOPIC THYROIDECTOMY, ULTRASONIC ENERGY

Alvarez GC, Faria EN, Carnieletto MDH, Pansard RB, Schmitz MD, David F.

Introduction: This study purpose to demonstrate the safety, feasibility and rate of successful procedures in the utilization of the endoscopic thyroidectomy (ET) method with harmonic scalpel in thyroid lobes less than 8 cm without incurring esthetical loss. **Methodology:** A prospective study of 49 patients undergoing ET through supraclavicular approach, divided into two groups: 1o. with 24 patients and 2o. with 25 patients. Ultrasonic energy was used in group 1 in order to perform resection. For group 2, 5 mm Clips were used. The parameters were as follows: surgical indication in benign thyroid pathology, size of nodule, type of surgery, conversion, operation time, morbidity, discharge, mortality, surgical findings. Utilization of technical variant with main port of 1 cm in the sternal notch and two 5 mm ports at the medial border of the esternocleidomastoid muscle, 1 cm, 2 cm above the clavicle on the same side of the lesion. Entering into the thyroid space of a 2 cm incision in the medium line of the prethyroid muscles. CO_2 was used in order to keep the space. **Results:** One case of conversion (4%) occurred in group 2, not meaningful. Fourteen (58.3%) right hemithyroidectomies and 10 (41.7%) left hemithyroidectomies were performed in group 1. In group 2 the numbers were 12 (48%) for right hemithyroidectomies and 13 (52%) for left hemithyroidectomies. There were no transoperative problems. Mean time for group 1 was 146.1 $\pm$ 37.4 min (from 120 to 240 min), and 181 $\pm$ 51.8 min (from 105 to 300 min) in group 2. The mean operation time of group 1 compared to group 2 decreased 34.9 min ($p = 0.0051$). Relative decrease of operation time was 19.3%. Postoperative complications were observed in four patients in group 1 (16.7%): one had infection in the suprasternal port, and three seroma. Group 2 had no postoperative complication ($P = 0.1086$). No mortality occurred in either group. Patients were release between 16 and 48 h after surgery (mean 20.8 h). The lobe presented sizes from 2.5 cm to 8 cm (mean 5.2 cm) in group 1. Group 2 presented a variation from 2 cm to 8 cm (mean 4.9 cm), no significant difference. The weight of lobe in group 1 varied from 4 g to 43 g (mean 17.1 g), and from 6 g to 30 g in group 2 (mean 12.6 g). **Conclusions:** The conversion and complications trans and post-operatives are infrequent and of little repercussion. The use of ultrasonic scalpel decreases operation time (significant 19.3%). Postoperative discharge is acceptable. This technique affirms itself as one more surgical alternative in the treatment of benign pathologies of the thyroid lobe less than 8 cm in size. The technique also enables the performance of a concomitant bilateral approach and provides high magnification of thyroid anatomy.

V-39

VIDEOENDOSCOPIC THYROIDECTOMY BY TRANSMAMMARY APPROACH

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Introduction: following the original technique described by Ohgami M from Keio University, Tokyo, Japan, thyroid surgery can be performed without cervical scars. **Material y methods:** A subcutaneous plane in the mammary area and a plane under the platisma in the neck were developed by blunt dissection through a 10 mm incision at the submamary crease on the paraesternal area, insufflating then CO_2 not higher than 6 mm Hg maximum pressure to create a working space. Three trocars specifically manufactured were introduced, one of 10 mm and 2 of 5 mm (through periareolar line on each side). Thyroid dissection and vessel division were performed totally endoscopically utilizing the harmonic scalpel (Ultracisionâ), with identification and preservation of parathyroid glands and recurrent inferior laryngeal nerves. **Results:** Five hemithyroidectomies, one isthmusectomy and one total thyroidectomy were satisfactorily performed using this technique in women age 19 to 46. No conversion to open surgery occurred. No cervical scars were left and the patients were very satisfied with cosmetic results. There was one case of transient dysphonia which recovered in less than three months until normal fibrolaryngoscopic check up. **Conclusions:** Videoendoscopic thyroidectomy by transmammary approach and CO_2 low-pressure insufflation is possible and safe, in highly selected cases and after adequate training, resulting in very satisfactory cosmetic outcomes.

V-40

TOTAL THYROIDECTOMY IN BENIGN DISEASE
Alvarez GC, Faaria EN, Carnieletto MDH, Pansard RB, Schmitz MD, David F.

Background: in many cases in the traditional approach of the thyroid gland, important anatomic structures are poorly visualized and the cosmetic effect is very unpleasant. The advance of the endoscopic technique to perform the thyroidectomy in a benign disease shows us it is feasible and has similar results to that obtained in an open thyroidectomy. This study aimed to demonstrate anatomic and technical details of the endoscopic thyroidectomy. **Methods:** The procedure is performed using three trocars (5 mm) placed as following: the main trocar (camera), above the sternal notch and the others, parallel and medially to the esternocleidomastoid muscle, in the same side of the larger lobe of the gland. By insufflation of CO_2 (6 mmHg) a real space is created to approach the gland directly. Beginning with the larger lobe, we identified the vases and nerves. The homeostasis is done using an harmonic scalpel (Ultracision; Ethicon Endo Surgery) and the isthmus resection is proceeded to free the gland. The next lobe is approached as the first. Before retreating the gland, a review has to be done carefully. **Conclusion:** Endoscopic thyroidectomy is feasible, safe and allows for an excellent cosmetic result. In selected cases it can be a valid option for the surgical treatment of thyroid diseases. Moreover, the great eyesight that this approach permits an advantage as regards the traditional techniques. The disadvantage is that it requires a lot of experience in endoscopic procedures.

V-41

TOTAL THYROIDECTOMY FOR MALIGNANT THYROID DISEASE
Alvarez GC, Faaria EN, Carnieletto MDH, Pansard RB, Schmitz MD, David F.

Background: as fine-needle aspiration cytology (FNAc) specificity for malignant disease of the thyroid is variable, routine intraoperative frozen section is often advocated. Among 115 endoscopic thyroidectomies performed, 6 cases of false-negative malignance in the FNAc were diagnosed in an intra operative frozen section, in which the endoscopic approach was already started. It had been decided to perform the total thyroidectomy upholding the endoscopic approach. This study aimed to demonstrate anatomic and technical details of the endoscopic thyroidectomy. **Methods:** Performed using three trocars (5 mm) placed as following: the main trocar (camera), above the sternal notch and the others, parallel and medially to the esternocleidomastoid muscle, in the same side of the larger lobe of the gland, 1 cm and 2 cm above the clavicle. CO2 (6 mmHg) was used to create a real space to approach the gland directly. Beginning with the larger lobe, we identified the vases and nerves. The homeostasis is done using a harmonic scalpel (Ultracision; Ethicon Endo Surgery) and the isthmus resection is proceeded to free the gland. The next lobe is approached as the first. Before retreating the gland, a review has to be done and the wound must be protected to prevent dissemination of tumor cells. **Results:** Of 6 patients underwent total thyroidectomy, there were no recurrence of the tumor neither morbidityes after 2 years of following. **Conclusion:** Endoscopic thyroidectomy is feasible, safe and allows for an excellent cosmetic result. In selected cases it can be a valid option for the surgical treatment of thyroid malignant diseases.

FP-42

LAPAROSCOPIC ROUX EN Y GASTRIC BYPASS AFTER THE AGE OF 60: A SAFE ALTERNATIVE FOR WEIGHT LOSS
Kennedy C, Szomstein S, Lo Menzo E, Podkameni D, Villares A, Chousleb E, Higa G, Soto F, Rosenthal R. The Bariatric Institute, Cleveland Clinic Florida, Weston, Florida

Background: Bariatric surgery has traditionally been limited to patients between the ages of 18-55. With the advancing age of our population and the advancement of laparoscopic techniques for surgery this age limitation needs to be re-evaluated. We report a series of patients over age 60 who underwent the Roux-en-Y gastric bypass for treatment of morbid obesity. **Methods:** A retrospective review was performed examining patients over the age of 60 who met the criteria for laparoscopic gastric bypass and underwent the procedure. **Results:** Two surgeons at our institution performed 814 gastric bypass procedures over 3 years, 32 were performed on patients greater than 60 years of age. The average age of the patients undergoing the procedure was 66 (60-75). The average BMI of the patients was 44 kg/mm^2 (35-64). The excess weight loss was 51% at 6 months, 72% at 1 year. The postoperative morbidity rate was 32%, mortality was 0%. **Conclusion:** Laparoscopic gastric bypass is a feasible and safe option for weight loss in patients over the age of 60. With the prolonged life span and overall aging of our population, it is becoming more evident that this population will require a reliable solution for treatment of morbid obesity.

FP-43

LAPAROSCOPIC CONVERSION OF NISSEN FUNDOPLICATION TO ROUX- EN-Y GASTRIC BYPASS
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Purpose: Gastroesophageal reflux (GERD) and morbid obesity often coexist. While Roux-en-Y gastric bypass (RYGBP) improves GERD, Nissen fundoplication doesn't affect morbid obesity. We present one case of laparoscopic conversion from Nissen to Roux-en-Y gastric bypass. **Methods:** A 48 year-old woman with a past medical history of coronary artery disease, obstructive sleep apnea, pulmonary embolism and a body mass index (BMI) of 37 underwent a laparoscopic Nissen fundoplication for severe gastroesophageal reflux disease in the past. Due to her obesity and her co-morbid conditions, she was advised to undergo RYGB. **Results:** After accessing the peritoneal cavity with an Optiview trocar (Ethicon®) through a supraumbilical incision, the pneumoperitoneum was established. A total of seven ports were introduced. After extensive lysis of adhesions the wrap was identified and divided. A standard antecolic antegastric Roux-en-Y gastric bypass with a 100 cm alimentary limb was carried out. The gastrojejunostomy was created with a linear stapler and the enterotomy closed with two hand sewn running absorbable sutures. No postoperative complications are reported. The hospital stay was 3 days. At the 4-month follow-up the weight loss was 39% of the excess weight, which is consistent with our institutional results. **Conclusion:** Laparoscopic conversion of Nissen to RYGB is safe and feasible.