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Poster Presentations

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P001: Abdominal Cavity and Abdominal Wall

Laparoscopic Transabdominal Preperitoneal Self-Adhesive Mesh Repair for Laterally Placed Ventral and Incisional Hernias

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Introduction: The incidence of incisional hernias after abdominal surgery is approximately 10–20 % with a recurrence rate of 25–63 % subsequent to a simple suture repair and of 2–32 % after prosthetic repair. Laparoscopic repair with intraperitoneal mesh placement using tacks for mesh fixation is associated with similar recurrence rates and chronic post-operative pain, with a higher risk of adhesions and neurovascular injury. The laparoscopic management of primary (eg. Spigelian hernia, about 1–2 % of all abdominal wall hernias), incisional non-midline ventral hernia (INMVH), or bone-bordered INMVH (INMVH-BB), can be technically demanding due to the lack of an adequate lateral space for overlapping and mesh fixation, especially in the proximity of bone surfaces.

Methods: All cases of laterally-placed ventral and incisional hernia since February 2013 to July 2014 were reviewed. As operative technique, a peritoneal flap is created by blunt dissection, and the sac reduced. A 15 × 9 cm polyester self-fixating mesh is placed (with or without defect closure) avoiding necessity of tacks and then the peritoneum is closed with a running absorbable suture.

Results: 12 patients in the considered time interval with small or medium primary or incisional ventral hernia (1 Spigelian hernia; 9 INMVH and 2 IMVH-BB: L2, L3 and M5 according to European Hernia Society Classification) underwent the laparoscopic transperitoneal sublay technique. Recurrence rate, perceived pain and overall costs were found to be lower than traditional techniques.

Conclusions: Although the preliminary outcomes, due to the short term follow-up, this technique has been proved to be safe, effective, simple to perform (comparable to the TAPP technique for inguinal hernias), low cost (reusable surgical instruments), and well tolerated by the patient in terms of post operative pain, either acute or chronic, avoiding fixing devices.

P002: Abdominal Cavity and Abdominal Wall

Does Self-Fixing Mesh Extend Indications to Transabdominal Pre-peritoneal Laparoscopic Hernia Repair (Tapp)?

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Introduction: Laparoscopic hernia repair is a well-defined surgical procedure, which offers significant advantages to patients. However costs, learning curve and operative times are the main drawbacks to a wide diffusion of this technique. It's demonstrated that this procedure is associated with a lower incidence of postoperative pain and allows an earlier return to normal activities rather the conventional open procedures. Laparoscopic repair is widely recommended in bilateral hernias, recurrent hernia and in selected patients with necessity of an early return to full physical activity. Once achieved a shortened operative time, using exclusively reusable surgical instruments and non-composite mesh, avoiding mesh fixation device, it's possible to obtain comparable costs in both procedures. In selected patients, was introduced the use of epidural anesthesia, obviating the requirement for a general anesthesia. Marketing of Self-Gripping Meshes allows a procedure simple to implement, really tension- and pain-free, through the avoidance of tacks and glue.

Methods: Since October 2012 to October 2014, we have considered 100 patients undergone to SGM-TAPP, compared to 350 open procedures. 87 males, 13 female, mean age 59 years; 70 unilateral groin hernias, 21 bilateral, 5 recurrent unilateral, 4 recurrent bilateral. Primary endpoints were recurrence rate, perceived acute and chronic pain, operative time, recovery time and morbidity rate.

Results: Patients were sequentially reviewed after 1 week, 1 month, 6 months and 1 year. The outcomes were:- hernia recurrence rate: 2 % (2 patients)- pain at 7th postoperative day: 0 pts in VAS Score - chronic pain (at 6 months): 0 %- mean operative time: 60 min in groin unilateral hernias, 110 min in bilateral- return to daily activity was found to be earlier than in open procedure recovery. Car driving rate after 7 days: 95 % in TAPP vs 70 % in open procedure- complication rate: 1 % (1 patient undergone to laparoscopic adhesiolysis in 3rd p.o.d. subsequent to an ileal obstruction due to peritoneal running suture performed with V-Loc)

Conclusions: 60 % of patients undergone to TAPP procedure at our Division, although not included in standard recommended criteria, has been treated with employment of self-fixating meshes, significantly reducing costs, perceived acute and chronic pain, combining with others TAPP benefits

P487: Different Endoscopic Approaches

Laparoscopic Total Mesorectal Excision in an Android Pelvis: A Stepwise Approach

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Introduction: The android (male) pelvis is a well recognized challenge in laparoscopic total mesorectal excision (TME). We present a surgical strategy for TME in a patient with mid-rectal cancer and renal cancer in a solitary kidney.

Method: A 59 yr old gentleman presented with a mid-rectal cancer. His staging CT scan showed no metastases. In addition, a Renal Cell Cancer (RCC) on the upper pole of the right kidney and a congenitally absent left kidney were demonstrated. The pelvic MRI showed a T2 N1 disease. At Multi Disciplinary Team meeting, the decision was made for a laparoscopic TME with covering ileostomy followed by laparoscopic partial nephrectomy. Our standard approach is a 4 port technique with the camera sited in the right upper quadrant. After stacking omentum & small bowel, the right ureter was identified and marked using hemolock. Almost all of the dissection was then performed from right to left with the hemolock in view, thereby protecting the precious single ureter. The pelvic nerves were preserved during dissection. The advantage of this approach of mobilization is it prevents specimen rotation and makes retraction/ tissue handling more manageable especially in patients with bulky tumours. It also minimises left lateral dissection which can be challenging to perform from the right hand operating ports. For lower rectal retraction, a fifth port in the supra-pubic region may be required. Alternatively, a percutaneously placed stitch to lift the bladder & seminal vesicle provides optimal retraction avoiding an extra port and facilitates deep pelvic dissection to expose the levator ani plate. We prefer a green cartridge for cross-stapling of anorectal junction to accommodate the inevitable angulation of the staples at this point. We always perform a covering loop-ileostomy

Results: The patient made an uneventful recovery and was discharged on day 6. The post-operative histology staging was T3N0M0 tumour with R0 resection. The patient went on to have resection of his RCC followed by ileostomy reversal.

Conclusion: An oncologically safe pelvic dissection in the narrow android pelvis can be performed by systematic approach. This case highlighted modifications which may be necessary for certain patients.

P488: Intestinal, Colorectal and Anal Disorders

Laparoscopic Ventral Mesh Rectopexy in Rectal Prolapse Surgery: Surgical Technique

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While the choice of techniques in current rectal prolapse surgery is largely patient-dependent, laparoscopic abdominal techniques come to the fore. Among the laparoscopic resection and suturing rectopexies or laparoscopic mesh rectopexies applied using different techniques, only the ventral (anterior rectus) rectopexy that is carried out through dissection of the frontal rectum towards the right lateral side of rectum and pelvic floor, can be administered primarily as a well-tolerated method with better functional outcomes. This video aims to reveal the technical details of laparoscopic ventral rectopexy applied to a 72 year-old female patient with comorbidities. In her physical examination, a rectal prolapse amounting to 8 centimeters was observed. The patient, also diagnosed with subacute rectitis in colonoscopy and rectal prolapse compatible findings in MRI, underwent laparoscopic ventral rectopexy. In addition to the 30-degree laparoscope entered from the 10 mm umbilical port, two 5 mm ports were also placed bilaterally. The patient was positioned slightly to her left in Lloyd Davis position and upside down. Following the hanging of the uterus with percutaneous suture, the pelvic floor was reached through a dissection of the right side of the rectum in presacral area by opening periton in the promontorium level and freeing the vaginal span on the frontal side of rectum. Polypropylene mesh sizing 15*3 cm was sent into abdominal cavity from the umbilical port. Following the fixing of the mesh to rectum front wall with separated 2–0 polypropylene sutures at the distal area and to midline at promontorium level using a tackler in the proximal area, mesh was retroperitonealized by suturing the peritoneum. The patient, given oral food on the twelfth hour following the surgery, was observed to be defecating normally 2 days after the operation. The controls in the first and sixth months were reported to be smooth. As a result, laparoscopic ventral rectopexy, which comes out as a minimally invasive method with no positive effect on constipation due to enhanced protection of the rectal innervation, can be used as a preferred method of surgery, particularly on patients with high morbidity potential.

P489: Clinical Practice and Evaluation

Endoclip Migration into the Common Bile Duct with Stone Formation: A Rare Complication After Laparoscopic Cholecystectomy

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The gold standard treatment for symptomatic gallstone disease is laparoscopic cholecystectomy (LC). Besides well known complications of LC, clip migration into the common bile duct is a rare but a serious complication. Development of clip migration can occur between 11 days and 20 years after cholecystectomy. The exact incidence is also unknown and English literature consists mostly case reports. Here we report a case of endoclip migration into the common bile duct with stone formation 5 years after LC.

Case Report: A 69-year-old-male admitted with recurrent upper abdominal pain and jaundice for 2 weeks. He had undergone LC for symptomatic gallstone in 2009 and did not have any complaints after LC. Physical examination was unremarkable except mild icteric sclera. Laboratory investigation revealed a total bilirubin of 4.8 mg/dL (normal; 0.1 to 1 mg/dL), aspartate transaminase of 46 U/L (normal up to 40 U/L), alanine transaminase of 36 U/L (normal up to 35 U/L), alkaline phosphatase of 450 U/L (normal; 70 to 120 U/L), and gamma glutamyl transpeptidase of 680 U/L (normal up to 60 U/L). Ultrasound of the abdomen showed a dilated extrahepatic biliary tree to the lower end. An abdominal computed tomography scan showed a dilated bile duct with a small radio-opaque metal density in the distal common bile duct. Magnetic resonance cholangiopancreatography showed a dilated common bile duct with a low signal filling defect in the distal common bile duct. An endoscopic retrograde cholangiopancreatography was undertaken. In cholangiography dilated intrahepatic bile ducts, common bile duct and choledoch and a 1.5 cm diameter enclaved stone was observed. After sphincterotomy stone removed with a basket. Meanwhile a metal clip extracted with stone pieces. The patient had an uneventful recovery and discharged at the 2nd day of procedure.

In Conclusion, endoclips after LC may migrate into the common bile duct leading to stone formation, obstruction, cholangitis, stenosis pancreatitis and even peritonitis. In the differential diagnosis of patients presenting with postcholecystectomy problems clip migration with biliary complications needs to be considered even many years after cholecystectomies. The clinical manifestations of clip migration are similar to that of noniatrogenic choledolithiasis, and ERCP is currently the treatment of choice.

P491: Liver and Biliary Tract Surgery

Treatment of Early Complications After Laparoscopic Cholecystectomy

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Introduction: The laparoscopic cholecystectomy represents the 'golden standard' in the management of acute cholecystitis. The most serious complication of laparoscopic cholecystectomy interventions is the injury of the main biliary duct or of its branches.

Objective: To evaluate the monitoring and the therapeutic options for the management of the complications of mini-invasive surgery in acute cholecystitis.

Method: Our study evaluates all laparoscopic cholecystectomies for acute cholecystitis (with pathological confirmation of the diagnosis) performed in our clinic between January 2010 and December 2013.

Results: Out of the total of 1585 laparoscopic cholecystectomies evaluated in the study 143 (9.02 %) presented early postoperative complications. The most frequent complications were: skin incision supurations/infection 41 (28.67 %), neuralgia 37 (25.87 %), bile leaks 30 (20.97 %), haemorrhages 13 (9.09 %), subhepatic abscesses 8 (5.59 %), thromboembolic complications 6 (4.19 %), residual lithiasis of the main biliary duct 5 (3.49 %), biliary peritonitis 3 (2.09 %). By type, the therapeutic management was: conservative 109 (76.22 %), ERCP + PST 7 (4.89 %), laparoscopic re-intervention 6 (4.19 %) and open surgery 21 (14.68 %). For the cases with acute injury of the main biliary duct the most frequent resolution was: ERCT + PST (with biliary stent employment), main biliary tract suture with Kehr tube and hepatojejunal anastomosis 'en Y, a la Roux'.

Conclusions: Perioperative incidents and postoperative early complications after laparoscopic cholecystectomy are difficult or even impossible to solve also mini-invasive. During laparoscopic cholecystectomy, injuries to the main biliary duct are rare, but seem to be inevitable; they appear to be unrelated to the experience of the surgical team, to the clinical presentation of the cholecystitis or to the surgical method used. The management of such injuries must be one of the skills mandatory to any surgeon that operates even the 'simplest' benign & asymptomatic cholecystitis.