

AFP3-5

laparoscopy, it is the best surgical approach for the treatment of groin hernias for the young soldier? A prospective study about 90 patients

Zatir Soufiane¹, Makhlof Boudekhlil², Meliani Benyakhlef², Leboukh Miloud², Adnane Doiaun², Ouzine Ramdane², Brix Samir², Selmani Azzedine², Koudjeti Rachid²

¹General Surgery, HMRUO, Algeria

²Department of Surgery, HMRUO, Algeria

The army needs a young and active population, to the accentuation of the inguinal hernia pathology in the military we have adopted the treatment of inguinal hernias laparoscopic view the postoperative advantages of this surgical approach, we realized a prospective study of 90 young military operates all for inguinal hernias through laparoscopic.

Material and Method: We operated 90 patients for inguinal hernias on the age a period of 02 years, the age of our patients varies entre 20 and 45 years, all of our patients are professional soldiers, 48% straight hernia, inguinal hernia 35% left, 13% inguinal bilateral hernias, 4% recidivantes hernias.

our results Was spectacular Especially on the plane early resumption of activities in post-surgery patients all Resumed Their activities after-15 days of convalescence, our exit from hospital patients out one day postoperative. the post operative complications Was Had a 3 patients scrotal edema, has had a postoperative patient Serom no recurrence During the two years post opeatoires, 3 patients had chronic post operative pain for a period of 15 days and 32 days-limiting.

Conclusion: Lapport of laparoscopy in the treatment of groin hernias can be an alternative to traitementdes inguinal hernias in young Militiare view the many

AFP4-1

Hybrid technique in the treatment of late-stage mesh-related inguinal hernia infection

Jun-sheng Li

Department of General Surgery, Zhongda Hospital, Southeast University, China

Background and purpose: Wound and mesh infections after hernia repair are very severe complications. While the deep-seated infection involving an inserted mesh may result in groin sepsis, which usually necessitates complete removal of the mesh to produce resolution. We aim to describe the role of hybrid (laparoscopic & open) technique in the treatment of late-stage mesh-related infection after tension-free inguinal hernia repair.

Methods: Patients with chronic mesh-related infection were treated surgically in our department. Patient were either by open procedure, or hybrid technique. The patients were re-operated through the same groin incision. We used methelene blue to guide the complete removal of mesh.

Results: All late-staged infected meshes were successfully removed without severe complications. No hernia recurrence and/or chronic groin pain occurred.

Conclusion: Methelene bule is useful for the complete removal of mesh, hybrid technique is a preferred method in some cases in the inspection of abdominal adhesion caused by mesh, and avoid visceral injuries during operation.

AFP4-2

Comparison of Triple Repair using Ventralight and Soft mesh with Omyra and Optilene in Laparoscopic Repair of Incisional Hernia

Abdullah Aldohayan, Fahad Bamehriz, S. Althuwaini

Bariatric Surgery, King Saud University Hospital, Saudi Arabia

Background and Aim: Laparoscopic repair is usually done by one mesh. In need to reduce the recurrence of the hernia, we introduce new technique using closure of the defect with monomox suture and 2 meshes to cover the defect.

Methods: The technique is done for 2 groups of patients. The first group has undergone Laparoscopic Repair of Incisional Hernia using Omyra, Optilene meshes and Monomox suture closing of the defect. Moreover, the second group has been repaired using ventralight, soft meshes and monomox suture repairing of the defect.

Results: The study is performed from January 2015 to January 2016 in the Medical City of King Saud University. The first group includes 14 patients (4 males and 10 females) and the second group has 10 patients (2 males and 8 females). The technique is done as day surgery and in follow-up no seroma and no recurrence in follow-ups.

Conclusions: Triple laparoscopic repair of incisional hernia for both group has the same outcome for the follow-up period. No seroma, wound infections and recurrence. Long follow-up is needed to demonstrate the best kind of meshes to be used.

AFP4-3

Poly lactide-caprolactone composite mesh used for ventral hernia repair: a prospective, randomized, single-blind controlled trial

Ying-mo Shen, Jie Chen, Li Sun, Fu-qiang Chen, Chang-fu Qin

Department of Hernia and Abdominal Wall Surgery, Beijing Chao-Yang Hospital, Capital Medical University, China

Objective: Composite surgical mesh is widely used in laparoscopic repair of ventral hernia but may carry the risk of postoperative adhesion and more serious complications. The present study was undertaken to demonstrate the effectiveness and safety of a new composite polypropylene mesh coated with poly L-lactide-co- ϵ -caprolactone (EasyProsthesTM).

Methods: This randomized, controlled trial was designed to compare EasyProsthes composite mesh (EPM) with ParietexTM Composite (PCO) in patients undergoing laparoscopic ventral hernia repair (with or without the hybrid technique). Hernia recurrence, chronic pain, seroma formation, intestinal fistula and obstruction, wound or abdominal infection, and ultrasound evidence of viscera adhesion were evaluated.

Results: Forty patients were randomly assigned to each of the EPM and PCO groups. All patients completed 24 months of follow-up. One patient in EPM group (2.5%) and two patients in PCO group (5%) developed mesh-viscera adhesions after surgery ($p=1.000$). No patients developed intestinal fistulas or obstructions. Seventeen patients in EPM group (42.5%) and 21 in PCO group (52.2%) developed post-surgical seromas in the operative area ($p=0.370$). One patient from each group developed postoperative wound infection. There were no cases of abdominal infection and no reports of chronic pain or hernia recurrence.

Conclusions: The incidence of postoperative complications in EPM group was similar to that seen with PCO. EPM is safe and effective when used in ventral hernia repair.

AFP4-4

Domestic absorbable tacks versus imported similar product for mesh fixation: A prospective randomized controlled clinical trial in China

Yi-ting Liu, Ying-mo Shen, Jie Chen

Department of Hernia and Abdominal Wall Surgery, Beijing Chao-Yang Hospital, Capital Medical University, China

Objective: To evaluate the safety and effectiveness of a domestic absorbable tack for mesh fixation, with compared with a widely used imported similar product.

Methods: From July 2014 to July 2015, a total of 119 patients with ventral hernia were enrolled in this prospective, single-blind (for subjects), randomized controlled clinical trial. They were divided into 2 groups randomly, 60 cases were received operation by same surgeons with domestic absorbable fixation (experimental group) and 59 cases with imported similar product (control group). Excellent rate of postoperative immediate fixation, fluency and accuracy of instruments were analyzed statistically. Meanwhile, recurrence, adverse events and complications after operation were observed.

Results: There were no statistically significant differences between the groups in terms of excellent rate of postoperative immediate fixation ($P=1.000$), fluency ($P=0.163$) and accuracy ($P=0.547$). During a follow-up period of 6 months, no recurrence in both groups and no significant differences were noted between the two groups for adverse events, seroma/hematoma, postoperative pain, discomfort sensation and etc.

Conclusion: It suggests that the domestic absorbable tacks in operation for mesh fixation is not inferior to imported similar product, so it is effective and safe to be worth promoting on clinical application.

AFP4-5

Standard procedure of laparoscopic incisional herniorrhaphy in our institution

Shuusuke Miyake, Jun Nakamura, Hirokazu Noshiro

Department of Surgery, Saga University Faculty of Medicine, Japan

Introduction: Laparoscopic surgery for incisional hernia has been widely spread. However, surgical indication and operative procedure for herniorrhaphy have not been well established yet and several recurrence and morbidity have been reported. Thus, it is important to establish the evidenced-operative procedure and strategy of surveillance for postoperative course.

Aim: We investigate the risk factor of laparoscopic surgery for ventral hernia retrospectively. In addition, we demonstrate our standard procedure of herniorrhaphy.

Method: Retrospective data from a cohort of 42 consecutive patients who underwent surgery for ventral hernia from April 2012 to April 2016 in our institution were reviewed.

Results: Forty laparoscopic surgeries of incisional hernia were performed. Patients' average age was 68 years old (41-86). Average BMI was 26.3 and average the size of hernia orifice was 79mm. Mesh repair was generally performed (siPOM or iPOM plus). Tacking method (tacking and four transfascial suture or less) to fix the mesh was performed for 19 cases and penetrated method (tacking and five transfascial suture or more) was done for 21 cases. Recurrence was occurred in four cases. Fixation method of the mesh was an independent recurrence risk factor. ($p = 0.048$)

Discussion: Our study shows the recurrence risk factor of laparoscopic ventral herniorrhaphy was less fixation of a mesh. Our procedure "iPOM plus method" is generally performed with closure of the hernia orifice by reverse U stitch method and mesh repair. Further study is needed to establish the evidenced-operative procedure and strategy of surveillance for postoperative course for the future.

AFP4-6

PROLENE MESH ERODING COLON FOLLOWING LAPAROSCOPIC INCISIONAL HERNIA REPAIR

Manash Ranjan Sahoo

Department of Surgery

Introduction: A 50 year old gentleman underwent laparoscopic repair of incisional hernia with prolene mesh, one and half month after he had discharge from umbilicus and it did not heal with all dressings, then he roamed around from one hospital to another hospital, finally he presented to our hospital 6 months following surgery. We did CECT abdomen and sinogram which revealed contrast entering to bowel.

Method: Under general anesthesia we followed the sinus tract and found that the culprit prolene mesh was eroding to the transverse colon, so the mesh along with the part of the transverse colon was resected and an end to end anastomosis was done and finally the abdomen was closed.

Result: The patient had an uneventful recovery and everything was healed.

Conclusion: Prolene mesh should not be used in laparoscopic incisional hernia repair.

AFP4-7

Laparoscopic repair of a traumatic abdominal wall hernia in a morbidly obese patient

Kiyotaka Imamura, Minoru Takada, Shintaro Takeuchi, Kouichi Teramura, Yukiko Tabata, Masaru Abe, Satoshi Hayama, Eiji Tamoto, Yoshihiro Kinoshita, Hiroaki Kato, Yoshiyasu Ambo, Fumitaka Nakamura, Yoshiaki Narita, Nobuichi Kashimura, Osamu Matsunami

Department of Surgery, Teine Keijinkai Hospital, Japan

This is a case of a 31-year-old morbidly obese man with history of obstructive sleep apnea and hypertension who presented to the emergency department with a traumatic abdominal wall hernia following a motor vehicle collision. A CT scan revealed a right upper flank hernia and multiple injuries including a cervical spine fracture. As his vital signs were stable without evidence of bowel incarceration, we did not operate in the acute setting. He remained in the hospital for one-month and then he was transferred to a rehabilitation facility. Unfortunately, eight months later he developed signs of incarceration requiring only a nasogastric tube. After this episode, an intermittent periumbilical pain after meals persisted and therefore we felt surgical repair was necessary. Fortunately, the patient was able to lower his BMI from 57.5 to 45 kg/m². We performed a laparoscopic repair to close the 12x7 cm hernia orifice using a 25x20 cm synthetic mesh placed intraperitoneally. Ten days after the operation, the patient was discharged and remained without any symptoms and recurrence in the 2-month follow-up.

If concomitant injuries accompany a traumatic abdominal wall hernia, delayed elective repair may be appropriate in selected stable patients. Twenty years have passed since the first laparoscopic approach was used to repair this uncommon hernia, and this case illustrates that it might be useful to treat morbidly obese patients.

AFP5-1

laparoscopic transabdominal preperitoneal hernioplasty in a medical college setting

Mushtaq Ahmed Chalkoo, Hilal Maqhdoomi, Mujahid Mir

Department of Surgery, Government Medical College Srinagar Kashmir India

Objectives: To determine the feasibility and patient's outcome of laparoscopic transabdominal preperitoneal mesh hernioplasty for inguinal hernias.

Patients and Methods: This study was carried out from March 2011 to April 2014. A total of 130 patients underwent laparoscopic transabdominal preperitoneal mesh hernioplasty (TAPP) for uncomplicated inguinal hernia. Of this, 10 patients presenting with bilateral inguinal hernias were operated in the single sitting. A 15 cm x 12 cm polypropylene mesh was used in all cases. Operative morbidity, postoperative pain, seroma formation, evidence of superficial infection, chronic groin pain and hernia recurrence were noted. The majority of the patients were discharged within 24 hours and follow-up was done at 1 week, 1 month, and 6 months.

Results: 130 patients presenting with uncomplicated inguinal hernias were operated over a period of three years in the department of surgery, Govt. Medical College Srinagar. The mean age of the patients was 39.18 years (range: 18 - 70 years). The median duration of operation was 48.5 minutes (range: 18 - 120 minutes). None of the procedure was converted to open inguinal hernia repair. Postoperative pain was observed in 9.23% of the cases and was easily controlled by oral analgesics. Six patients (4.62%) developed seroma, out of which one required aspiration while others settled conservatively. Two patients (1.54%) developed wound infection and one patient (0.77%) had recurrence. None of the patients developed scrotal hematoma or neuralgia. Return to normal activity after TAPP repair was found to be