

AS21-1

The use of the new "target mesh" in the preperitoneal space, for the treatment of the small umbilical hernias, with an open minimal invasive surgery. VIDEO

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Our preference to treat an umbilical hernia is to put a mesh in the preperitoneal space. The main difficulty of the technique was to unroll the prosthesis through the small incision. So we created a new semi rigid and self-expandable mesh. It is the target mesh: a twelve cm rounded polypropylene mesh with three not knitted and not woven concentric rings. The movie shows the preperitoneal dissection of an umbilical hernia, with several small holes. The mesh can be cut. The main step of the procedure is the preperitoneal space dissection.

A personal prospective study (n=112) is under way, under the control of the French "club hernie" data base.

Follow up: [15-63] months. 79 men, 33 women

Primary 108, secondary 4

Day surgery, n=106 (88%)

Complications; Seroma, n=2; Umbilical necrosis, n=1; Recurrence, n=1 with a good result after reoperation

Post-operative pain at one month: Visual Analogic scale (VAS)

VAS=0: 96 (86%) VAS [1-3]: 11 (10%) VAS [4-7]: 4 (3.5%) VAS 8: 1 (0.90%)

Post-operative pain between 3 and 6 month (Only the patients with pain at one month are reviewed)

VAS=1-3: 5 VAS=4-7: 1 VAS=8: 1

For all these patients the post-operative pain is less important than the preoperative one

Post-operative pain between 12 and 51 months (All the patients are reviewed at one year)

VAS=4-7: 4 patients

Conclusion: The use of the extra peritoneal mesh is a safe technique. The use of the target mesh make easier to unroll the prosthesis in the Preperitoneal space

AS21-2

Retrospective analysis of umbilical hernia repair with ULTRAPRO Plug

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Objective: The aim of this retrospective study was to investigate the efficacy and safety following umbilical hernia repair with ULTRAPRO Plug.

Background: Umbilical hernia (UH) is one of the commonest surgical lesions. There is evidence that mesh repair for primary umbilical hernias results in less recurrences and complications compared with tissue repair. Different hernia repair devices and surgical approaches are used in umbilical hernia. ULTRAPRO Plug (UPP) has been widely adopted for inguinal hernias with excellent results. However, rarely reported on the use of this hernia patches for umbilical hernia repair.

Methods: The medical records of 93 patients who underwent umbilical hernia repair using the ULTRAPRO Plug between October 2011 and September 2015 were reviewed. Demographics, surgical information, and outcome were assessed.

Results: Out of 93 patients, there were 28 male and 65 female patients. The mean age was 51.6 y. Mean duration of a hernia surgery was 21.2 min, and 85 patients were day-surgery. Mean time to complete return to daily activities was 5.6 d. No mortality or major complications occurred during the perioperative period. Median follow-up was 27 mon, and the total follow-up rate was 93.5%. Early postoperative complications included one seroma, two fat liquefactions and one superficial surgical site infection. During the follow-up, recurrence in two patients and chronic mesh infection in one patient were found. There were no chronic pain and foreign body sensation.

Conclusions: Repair of umbilical hernias with ULTRAPRO Plug is a simple and effective procedure without major postoperative events.

AS21-3

Redundant skin problems after laparoscopic paraumbilical hernia repair: Is there any gold standard technique to prevent these complications?

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Introduction: After laparoscopic paraumbilical hernia repair, we have encountered problems like seroma and post operative pain. However as a beginner or starter on laparoscopic repair, we found many redundant skin fold' problems during follow up period of our patients.

Method and Results: From september 2014 to september 2015, there were total number of 28 patients who underwent laparoscopic paraumbilical hernia repair with composite mesh used both subfascial sutures and tackers. During our study period of one year, there were 12 patients with different types of redundant skin problems.

Conclusion: Although most patients who underwent laparoscopic mesh repair got many advantages from minimally invasive procedure, the redundant skin fold was still a hurdle for their full satisfaction.

AS21-4

Mesh vs Suture For Small Ventral Hernia Repair

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Small ventral hernias (<2cm) are commonly repaired by open suture Repair or open mesh repair. It has not been shown that one surgical technique is superior over the other and both techniques are still being practiced worldwide. The Parietax™ Composite Ventral Patch (Covidien, USA) is made especially for open mesh repair for small ventral hernia. It is safe and easy to use. The hydrophilic absorbable collagen film allows intra-peritoneal placement without formation of adhesions to bowel. Our prospective case series looks at comparing our early results of the use of ventral patch and primary suture repair for ventral hernia. Data of Fifteen patients underwent ventral patch repair and 12 patients underwent primary suture repair was collected. Patients demographic, size of hernia defect, mesh size, surgery time, pain scored and complications were documented. There is no significant difference in mean operating time (57.4 vs 52.9 minutes), size of defect, pain score, complications rate and length of stay demonstrated in our early follow up results. Our study has shown that the use of ventral patch mesh in ventral hernia repair does not require longer operating time and no difference in outcome in the early post-operative period (6 months). However, the presence of mesh may provide more strength to the repair and likely less chance of Long term recurrence. Further study with Long term follow up would be required to confirm such hypothesis.

AS21-5

Spigeean Hernia: A Diagnostic Dilemma

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Spigeean hernias, also called as lateral ventral hernias are rare hernias to present themselves in clinical practice. The significance of these hernias lies in the fact that they are commonly intra-parietal hernias and are hence difficult to diagnose clinically. Moreover the neck of these hernias is usually small posing a fair risk of strangulation.

With the advancement in laparoscopic hernia repair, there is evidence that spigeean hernias too can be repaired laparoscopically thereby causing less morbidity and shorter hospital stay.

Here we present a rare case of large spigeean hernia that posed to us as a diagnostic dilemma. The symptoms, clinical findings and ultrasound of the patient were not specific and a CT scan had to be used as the measure to confirm the diagnosis. The patient was then managed successfully with laparoscopic intraperitoneal onlay mesh repair.

The details of the case and a brief discussion is included.

AS21-6

Trans-fascial Hernia following sublay repair of an umbilical hernia

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Trans-fascial Hernia is a very rare entity at the site of trans-fascial sutures taken during previous repair of ventral hernia.

It is recommended that mesh fixation is necessary during repair of ventral hernia.

In open surgery mesh is often placed in retro-rectal plane (sublay). This mesh is fixed by trans-fascial sutures passing through entire abdominal wall.

In Laparoscopic repair of ventral hernia, the mesh is placed in intraperitoneal & fixed with four trans-fascial sutures & tackers.

Trans-fascial sutures are usually placed at the border of the mesh & secured with an "Air knot", which is a loose knot not strangulating the entrapped muscles.

We present a case of trans-fascial hernia following sublay repair for an umbilical hernia.

We will discuss the causes, prevention & treatment with supporting three minutes video.

AS21-7

The clinical efficiency of sublay hernioplasty in adult patients with lumbar hernia

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Objective: To investigate the clinical efficiency of sublay hernioplasty in adult patients with lumbar hernia.

Methods: The clinical data of 18 patients with lumbar hernia were analyzed retrospectively. All cases were repaired with sublay hernioplasty and had operation.

Results: The data included 11 male patients and 7 female patients with median age of 59 years. Of the patients, 5 cases were the left lumbar hernia and 13 cases were the right. There were 16 patients with primary hernias and 2 patients with recurrent hernias, 8 cases with radical nephrectomy, 3 cases with kidney stone surgery, 1 case with pubic bone osteotomy, 2 cases with laparoscopic renal cysts, 2 cases with laparoscopic adrenal tumor, 1 case with waist closed injury and 1 case with the bulge at waist after herpes zoster. The operation was performed successfully in all patients. There were no injuries of the kidney, bowel and ureter during the operation. 2 patients with analgesics added for 1 week after the operation. The postoperative hospitalization time was 7-15d, with an average time of 10d. There were no infection of obstetric surgical wound, hematoma and fat liquefaction after operation. During the period of 6 to 48 months of follow-up, all cases contact. There was no recurrence, chronic pain and material infection.

Conclusions: The sublay hernioplasty in the treatment of lumbar hernias is safe and feasible. It's typically appropriate for adult patients with lumbar hernias.

AS21-8

Laparoscopic lumbar hernia repair

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Background and Purpose: Lumbar hernias are rare. Many techniques have been described for the surgical repair of lumbar hernias including primary repair, local tissue flaps, and conventional mesh repair. In this report, we report our series of cases of superior lumbar hernias, which were successfully repaired using two different laparoscopic techniques.

Methods: We successfully performed two kinds of laparoscopic lumbar hernia repair, the laparoscopic transabdominal preperitoneal approach and the IPOM technique. Trans-abdominoretroperitoneal laparoscopy is undertaken with three trocars placed into the peritoneal space along the midline or along the external border of the rectus abdominis. The dissection is begun by incising the peritoneum, an appropriate sized prolene mesh is used to reconstruct the defect. The mesh is then positioned in place, and fixed with spiral tacker to the surrounding muscles. And the incision was closed with suture. IPOM was performed similar as in incisional hernia repair.

Results: 8 cases of lumbar hernia was repair with either TAPP technique (2), or IPOM (6) procedure. Compared with open procedure, both types of procedures provided excellent operative visualisation, preventing damage to nearby structures, and were associated with lower pain scores, shortened hospital stay, early return to routine activity, more favorable cosmetics and minimal morbidity.

Conclusion: laparoscopic lumbar hernia repair was associated less postoperative complications and early return to normal activity.

AS21-9

Complications and treatment experiences of lumbar hernia

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Objective: To avoid potential operative complication and increase the cure rate after lumbar hernia.

Methods: A retrospective analysis was performed about complications and treatment experiences of thirteen clinical cases who were accepted treatment in our hospital during April 2006 to April 2016.

Results: The mean age of the 11 patients was 58 ± 7 years, with the average BMI 26.4 ± 4.2 kg/m². The average size of the hernia defect was 5.6 ± 6.4 cm². Seven patients got the simple open repair and six patients got the tension-free open repair. During the follow-up time of one to ninety-seven months, there are four patients (30.77%) got the post-operative complications. Two patients (15.38%) had infection (both of them used biological mesh) after lumbar hernia repair. The etiology research of these two cases showed that one was after trauma, other one was after a resection of intramuscular cyst. Anyone else were primary. One patients (7.69%) developed hematoma. One patient (7.69%) had seroma. All of these patients were completely cured when they leave our hospital. There are no perioperative deaths and no deaths. The average hospitalization time was 14.6 ± 13.4 days. There was no intra-operative visceral injury in all these cases.

Conclusions: According to our experience in this research, seroma, hematoma and infection are the most common complications after lumbar hernia repair. There is a close relationship with etiology and post-operative infection. Early diagnosis, effective drainage and pressuer dressing are the key to recovery.