AS30-6

Laparoscopic percutaneous extraperitoneal closure for over 80 year-old patients

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Background and Purpose: The anterior repairs were the standard procedure to treat adult inguinal hernias in our hospital. Since 2013, we introduced laparoscopic hernia repairs (TAPP, LPEC), and developed the indication of LPEC for over 80 year-old patients with inguinal hernias.
Materials and Methods: This study evaluated the hernia size, surgical methods and time, and post-operative hospital stay. For over 80 year-old patients, 24 cases treated for 2010 to 2012, and 25 cases treated after 2013.
Results: In 24 cases for 2010 to 2012 treated with anterior repairs, mean surgical time and post-operative hospital stay were 92.9 minutes and 10.8 days. 5 of 24 cases were died by other causes in 2 to 5 years after surgery. In 25 cases, 16 cases were unilateral hernia consisted of LPEC 3, TAPP 10, and anterior repairs 3. Mean surgical time was LPEC 80 minutes, TAPP 114.7 minutes, and anterior repairs 80.3 minutes. Mean post-operative hospital stay was LPEC 3 days, TAPP 2.6 days, and anterior repairs 5.7 days.
Conclusion: LPEC is the better procedure. LPEC can be performed less invasively and to keep QOL in the advanced age population. No complications were seen in LPEC.

AS31-1

HERQL, the Hernia-specific Quality of Life Assessment Instrument): an update

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Background: With the development of prosthetic mesh and tension free techniques, the recurrence rate following hernia repair has been reduced, and hernia outcomes research should focus on post-operative quality of life and potential complications.
Methods: A novel hernia quality of life assessment instrument, HERQL, was developed. The HERQL questionnaire comprises a 4-item summative pain score measuring pain and discomfort resulting from various strenuous activities. Symptomatic burden and functional domains, as well as post-operative satisfaction and potential complications are evaluated as well.
Results: A total of 200 HERQL surveys were completed by 114 patients with groin or abdominal wall hernias. Internal reliability of the summative pain score was satisfactory, with a Cronbach's alpha of 0.83. Criterion validity was examined by concomitant assessment of the pain/discomfort and health impact subscales of the EQ-5D questionnaire, with substantial to moderate correlations. Pre-operative patients reported more severe hernia protrusion, more pain during heavy exercise, and greater activity restriction and health impairment than follow-up patients, indicating clinical validity. The conceptual structure of HERQL was evaluated to determine the causal relationship between formative symptomatic subscales and reflective functional status indicators. Repeated measurement of summative pain scores revealed an estimated time effect of -0.24, which was the rate of change in the summative pain score across the pre-operative, immediate post-operative, and follow-up periods suggesting the clinical responsiveness of HERQL.
Conclusion: This study will facilitate hernia outcomes research and enhance the quality of care for this common disease by providing a validated HERQL instrument with enhanced sensitivity.

AS31-2

Comparison of the perioperative QOL in inguinal hernia surgery -Between laparoscopic approach and anterior approach-

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Purpose: we made questionnaires about QOL after surgery and compared the early QOL between TAPP and anterior approach. Methods; 159 patients had elective inguinal hernia repairs in our hospital from December 2013 to June 2016. 97 patients had TAPP operations (20 both sides) and 62 anterior approach operations (4 both sides). Medical secretaries gave VAS (Visual analog scale) score questionnaires to those patients at 1-3 days after surgery, and at 2-3 weeks after surgery. Questions are about disturbance with early QOL.
Results: mean unilateral operative time was 118.3 and 65.8 minutes in TAPP and anterior approach respectively. P values of T-test of disturbance with walking, sensing of bloating, pain (both navel and inguinal), sensing of foreign body, and swelling of wound in 3 days were 0.06, 0.03, 0.01, 0.87 and 0.21 respectively in favor of anterior approach group. But the differences in those symptoms in 3 weeks disappeared between those two groups. But limiting for 91 latest cases only, there was no significant disadvantage for those QOL factors in 1-3 days between them.
Discussion: perioperative QOL of anterior approach was not inferior to laparoscopic surgery and even better in early series. We assumed that long operative time of early TAPP group mostly accounts for the poor QOL in early series.
Conclusions: the surgery with anterior approach should be reevaluated to be chosen in day surgery. We need to experience more cases to find out the best operation.

AS31-3

IMPROVING PATIENT OUTCOMES WITH INGUINAL HERNIOPLASTY LOCAL ANAESTHESIA VERSUS LOCAL ANAESTHESIA AND CONSCIOUS SEDATION. Preliminary Results of A Randomized Controlled Trial

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Background: Conscious sedation is increasingly being used in ambulatory surgery, with the aim of improving patient outcomes, including patient satisfaction. Reports demonstrate that the use of conscious sedation in inguinal hernioplasty performed under local anaesthesia is safe and effective in improving patient satisfaction. No previous randomized trial has assessed the benefit of conscious sedation in this regard.
Methods: This represents preliminary analysis of a randomized controlled trial comparing local anaesthesia alone (LA) and local anaesthesia with conscious sedation (LACS) in patients undergoing inguinal hernioplasty. Outcomes measures of interest included demographics, operative time, complications, time to discharge, pain scores and overall patient satisfaction with the procedure. T-test and Chi-Square tests were used for analysis. P value of < 0.05 was considered significant.
Results: A total of 144 patients were included and subjected to analysis. Seventy-four patients were assigned to the LA group and 70 patients to the LACS group. Significantly more patients in the LA group experienced pain during the procedure compared to the LACS group (p=0.022). Procedural pain severity was also greater in the LA group (p=0.0098). There was no difference between groups with respect to time to discharge (p=0.5). Overall patient satisfaction at discharge and at two weeks postoperatively was better in the LACS group (P=0.009; 0.001).
Conclusion: The use of conscious sedation for local inguinal hernioplasty is safe, results in less pain experience and severity and is associated with better patient satisfaction. The use of conscious sedation does not delay patient discharge.

AS32-1

What are the differences between female and male groin hernias ?

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Groin hernias are more common in males. In addition,the presentation, Gilbert types, surgical repair, convalescence and recurrences may be different. Among 3344 adult groin hernia patients repaired from 2001 to 2014 (prospective database), 397(12%) were female. The age distribution, involved groin, anesthesia, Gilbert types, endometriosis, repair procedure, length of stay, postoperative pain and recurrence of the 397 females were compared with those of the whole group. Result: Average age: female / whole group were 46.4+-16.1/55.7+-18.4. Involved groin: right (47%/46.1%), left (30%/28.6%), bilateral ((7.8%10.7%), femoral (8.6%/3.8%), recurrent (6%/12.6%). Anesthesia: local (15.6%/21%), epidural (74.6%/70%), general (9.8%/9%). Gilbert types: 2 (60.5%/ 44.7%), 3 (22%/25.8%), 4, 5, 6 (7%/25.6%), 7 (11%/3.5%). Endometriosis: 1.5%/0.2%. Repair procedure: anterior repair (80%/32%), posterior (2.5%/23%), bilayer(17.5%/45%). Length of stay: 0 day (7.3%/7.8%), one (69.2%/68.5%), 2 (16.2/20%), 3 (5.3%/2.2%), >4 (2%/1.4%). Postoperative pain (VAS 0~5) at day 1, 6 and 90: no difference statistically. Long-term recurrence: 0.5% / 0.3%. Conclusion: Female groin hernias are different from males. the average age is younger, the involved groin has more femoral hernia(8.6%/ 3.8%) and less recurrent hernia (6%/12.6%),female has more femoral defect (11%/ 3.5%), less direct defect (7%/25.6%), 1.5% of the female patients have endometriosis in the sac, higher percentage of female received anterior repair (80%/32%), there is no differences on the length of stay, postoperative pain and recurrences.

AS32-2

Clinical Characteristics of Laparoscopic Repair for Groin Hernias in Female Patients: A Report of 225 Cases

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Objective: To investigate the clinical characteristics of laparoscopic repair for groin hernias in female patients.
Methods: The clinical data of 246 groin hernias in 225 female patients were analyzed retrospectively. Between January 2001 and December 2013, these female patients undertook laparoscopic hernia repair procedures, including 170 TAPPs for 183 hernias and 55 TEPs for the remaining 63 ones. According to the maintenance of round ligaments, the data were classified into preservation group (104 hernias in 95 patients) and transection group (142 hernias in 131 patients).
Results: We have 36 patients with 41 femoral hernias (16%). 12 cases are incarcerated. All incarcerated femoral hernias got repaired with TAPP. We performed 90 TAPPs (86.5%) and 14 TEPs (13.5%) in the preservation group, and 93 TAPPs (65.5%) and TEPs 49 (34.5%) in the transection group (P=0.002). The average ages in preserved and transected groups are 41.2±1.7 and 62.3±1.2 year-old (P<0.000) respectively. The time of operation in preserved group is 31.3±1.3 minutes, compared to 25.0±1.0 minutes in transected group (P<0.000). The post-operative hospitalization is 1.5±0.2 days. All patient returned to normal activity within 2 weeks. No recurrence were noted in the follow-ups.
Conclusion: It is feasible to apply laparoscopic procedures for groin hernias in female patients. The surgeon should thoroughly evaluate multiple factors, including age, time of operation, recurrence and so on, before transecting the round ligament. Both peritoneum dissection and re-suture technique and inner ring keyhole technique are available for the preservation.