Minimally Invasive Management of Inguinoscrotal Hernias with Sac Abandon Technique

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Introduction

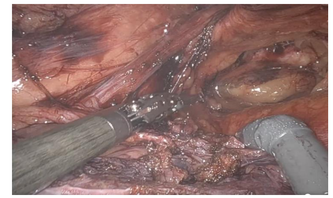
- Minimally invasive inguinal hernioplasty is a widely accepted alternative to open repair; however, the optimal management of inguinoscrotal hernias remains controversial
- Complete reduction of large inguinoscrotal hernia sacs often requires extensive dissection, which may increase complications
- Primary abandon-of-the-sac (PAS) is an alternative technique in which the hernia sac is divided at the internal inguinal ring and the distal sac is left in situ prior to myopectineal orifice dissection and mesh placement during transabdominal preperitoneal (TAPP) repair
- We present our experience with PAS during TAPP repair, comparing outcomes between patients undergoing primary sac abandonment, late sac abandonment due to difficult dissection from cord structures, and complete sac dissection

Method

- We performed a retrospective review of a prospectively maintained database of patients undergoing minimally invasive TAPP repair for inguinoscrotal hernias
- Demographic and clinical variables were collected- including operative and postoperative outcomes
- Patients were stratified into three groups based on intraoperative management of the hernia sac: primary abandon-of-the-sac (PAS), distal sac abandonment during dissection (DSA), and complete sac dissection (CSD)
- Postoperative outcomes, including operative time, complications, and seroma formation, were evaluated
- Patients were followed post-operatively to assess complications
- Comparative analyses were performed between groups to evaluate operative and postoperative outcomes

Results

Variable	PAS (N= 28)	DSA (N= 6)	CSD (N= 5)	P-Value
Mean age (years)	48 (29-74)	56 (40-72)	54 (35-72)	0.12
Mean BMI	28	27	26.8	-
Median Operative Time (min)	174	164	153	0.33
Seroma	8 (28.6%)	4 (66.7%)	3 (80%)	0.09
Seroma Aspiration	4	0	1	-
Reoperation	1 (3.6%)	0	0	-



Conclusions

- In this series, PAS appeared safe and reproducible
- PAS was associated with a lower rate of postoperative seroma and related symptoms
- Long-term follow-up suggests durable outcomes with low complication rates, supporting its use as a viable surgical option

Citations

- Leibl BJ, Schmedt CG, Kraft K, Ulrich M, Bittner R. Scrotal hernias: a contraindication for an endoscopic procedure? Results of a single-institution experience in transabdominal preperitoneal repair. Surg Endosc. 2000 Mar;14(3):289-92
- Li J, Gong W, Liu Q. Intraoperative adjunctive techniques to reduce seroma formation in laparoscopic inguinal hernioplasty: a systematic review. Hernia. 2019 Aug;23(4):723-731
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