Endoscopic preperitoneal inguinal hernia repair using an anatomically shaped mesh

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Introduction: Endoscopic preperitoneal inguinal hernia repair is a widely accepted option for the treatment of primary and recurrent inguinal and femoral hernias. We report on our experiences with an anatomical preshaped polyester mesh.

Methods and patients: The preperitoneal space is created by blunt dissection using three standard trocars. The hernia sac is reduced and the anatomical mesh is placed, covering the medial, lateral and femoral region.

From 1/2005 to 5/2006, preperitoneal endoscopic hernia repair was performed in 187 patients (167 male, 20 female, aged 57±29[38-82] years) with primary (n=178) and recurrent (n=33) inguinal (n=195) and femoral (n=16) hernias. In all patients, a specially designed, anatomically preshaped two-component polyester-mesh (TECT 1510A, Sofradim, France) was used.

Results: Procedure time was 45±27[18-72 min.]. Perioperative complications occurred in 3% of the patients, postoperative complication rate was 3.5%, respectively. No transfusions were necessary, 5 patients, postoperative complication rate was 3,5%.

- Procedure time was 45±27[18-72 min.]
- Procedure time (unilateral) 41±17[15-55 min.]
- Procedure time (recurrent) 42±18[15-53 min.]
- Procedure time (bilateral) 55±15[25-72 min.]
- Perioperative complications: 5 patients
- Postoperative complications: 6 patients
- Hospital stay: 2±1.8[1-7] days
- Recurrence: none
- Nerve irritations: 6 patients

Conclusions:

Endoscopic preperitoneal inguinal hernia repair (TEPP) with an anatomical preshaped polyester mesh is feasible, safe, economic and comfortable for the patients and the surgeons. The optimal position of the mesh allows for low recurrence rates.