Surgical Technique of Totally Extraperitoneal Repair (TEP) for an Inguinal Hernia after Operation Using a Lower Abdominal Incision

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Abstract

Introduction: Laparoscopic approaches: Transabdominal Preperitoneal inguinal hernia repair (TAPP) and Totally Extraperitoneal repair (TEP) are alternative to conventional treatment. Surgical Technique: Our TEP after operation, using a lower abdominal incision, is performed under general anesthesia with the patient in supine position. A surgical scar and adhesions on the middle line (after lower abdominal incision) occur in many cases. The abdominal anterior rectus is only cut on the affected side, the abdominal rectus is confirmed, and the abdominal rectus muscle is splinted. Finally, the abdominal posterior rectus is cut, and the extraperitoneal space, including the posterior rectus space, can be easily reached. Dissection can be made without a balloon in the extraperitoneal space. Anatomic landmarks, such as the attenuated posterior rectus sheath, especially the inferior epigastric artery and vein, are important but we can perform the ordinary conventional TEP after reconfirming those landmarks.

Same access point. TEP can be performed even if the abdominal adhesions are severe. Our technique is effective, expect when using the lower abdominal incision, due to the postoperative status of prostatic cancer.

Conclusion: Postoperative TEP, using the lower abdominal incision, is possible for an inguinal hernia.

Keywords: TEP; Lower abdominal incision; TAPP

Introduction

The present study demonstrates that both endoscopic hernia repair methods, Transabdominal Preperitoneal inguinal hernia repair (TAPP) and Totally Extraperitoneal repair (TEP) are safe, feasible, and associated with a low postoperative morbidity rate for the repair of a primary inguinal hernia [1].

Laparoscopic approaches are alternative to conventional treatment. However, there are differences between TAPP and TEP.

Surgical Technique

Our TEP after operation, using a lower abdominal incision, is performed under general anesthesia with the patient in supine position. The first incision (12 mm) is made below the umbilicus at the midline. A 3-port puncture method is adopted. A surgical scar and adhesions on the middle line (after lower abdominal incision) occur in many cases. The abdominal anterior rectus is only cut on the affected side, the abdominal rectus is confirmed, and the abdominal rectus muscle is splinted. Finally, the abdominal posterior rectus is cut, and the extraperitoneal space, including the posterior rectus space, can be easily reached (Figure 1). Dissection can be made without a balloon in the extraperitoneal space. Anatomic landmarks, such as the attenuated posterior rectus sheath, especially the inferior epigastric artery and vein, are important but we can perform the ordinary conventional TEP after reconfirming those landmarks [2].

Discussion

Currently, laparoscopic inguinal hernia repairs are widely-accepted and popular. Besides,
Laparoscopic inguinal hernia repair has shown efficacy and safety. According to the guidelines of the International Endo Hernia Society, there are two standardized techniques for laparoscopic groin hernia repair: TAPP and TEP repair [3].

There are no statistically significant differences regarding postoperative complications, particularly recurrence and chronic pain. However, TEP is different from TAPP. TEP is superior for a bilateral inguinal hernia because both sides undergo operation from the same access point [4]. TEP can be performed even if the abdominal adhesions are severe. Our technique is effective, expect when using the lower abdominal incision, due to the postoperative status of prostatic cancer (TEP may be prohibited after a prostatic cancer operation).

**Conclusion**

Postoperative TEP, using the lower abdominal incision, is possible for an inguinal hernia.

**References**