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Introduction

Recurrent inguinal hernias after previous repair present a technical challenge for minimally invasive surgery. Laparoscopic totally extraperitoneal (TEP) approach may be complicated by peritoneal tears, necessitating alternative strategies.

Case Report

A 68-year-old male with prior right inguinal hernia repair presented with recurrence two years postoperatively. Laparoscopic TEP was planned; however, upon insertion of the trocar into the preperitoneal space, a peritoneal tear occurred. Conversion to transabdominal preperitoneal (TAPP) approach revealed a large oblique inguinal hernia sac with significant peritoneal defect, precluding secure closure over the mesh. A sufficiently sized intraperitoneal-onlay mesh (IPOM) was chosen to cover the defect and the Stoppa area, fixed with two tackers to the Cooper ligament and anterior superior iliac spine. The procedure was completed without complications.

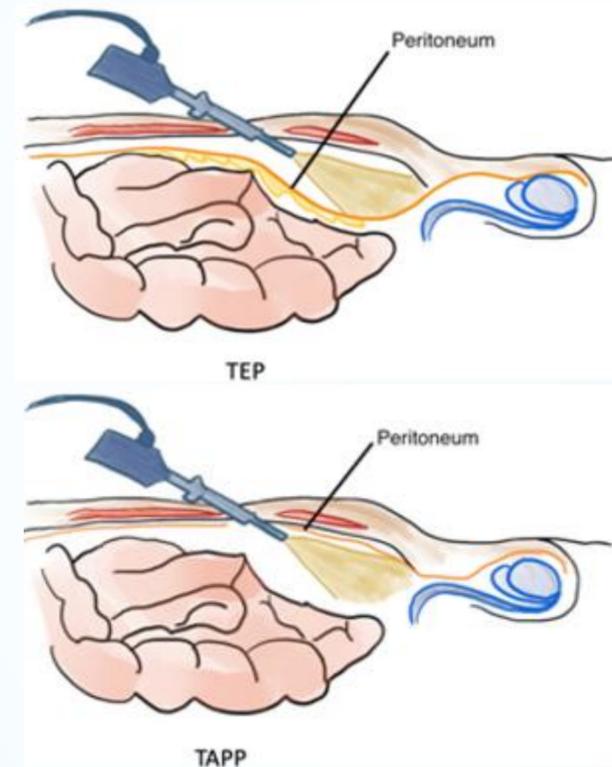


Figure: Anatomical comparison of TEP and TAPP approaches in laparoscopic inguinal hernia repair. The illustration highlights the key anatomical and technical differences between the two minimally invasive techniques. In the **Totally Extraperitoneal (TEP)** approach (upper image), the dissection is performed entirely within the preperitoneal space, avoiding entry into the peritoneal cavity. In contrast, the **Transabdominal Preperitoneal (TAPP)** approach (lower image) involves transperitoneal access, with subsequent incision of the peritoneum to reach the preperitoneal plane for mesh placement.

Discussion

This case illustrates the relative contraindications of laparoscopic TEP in recurrent hernias with potential for extensive peritoneal defects. Conversion to TAPP may be technically limited, and IPOM technique can offer a safe alternative. IPOM provided effective coverage, secure fixation, and rapid postoperative recovery, with outcomes comparable to standard TEP or TAPP approaches.

Conclusion

In complex recurrent inguinal hernias, intraoperative adaptability is crucial. IPOM placement represents a reliable option when TEP or TAPP are not feasible, maintaining safety, effectiveness, and minimally invasive benefits.

References

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