

Trocar Off The Line: Optimizing Access in Laparoscopic Hernia Surgery When Anatomy is Against US

Zabala, J. Díaz, D. Serrano, J Granizo M, García, A. Albiach, R. Galindo, P.
Hospital Universitario de Torrejón

Totally extraperitoneal (TEP) laparoscopic inguinal hernioplasty is a minimally invasive technique with notable advantages. However, in patients with abdominal scarring or indwelling devices such as peritoneal dialysis catheters, anatomical alterations may complicate dissection and increase procedural risk.

Aim: To assess the feasibility and safety of TEP technique modifications in the presence of a peritoneal dialysis catheter.

Material & Methods

Elective TEP inguinal hernioplasty was performed on a patient with a pre-existing peritoneal dialysis catheter.

Preoperative planning emphasized:

- Strategic trocar placement.
- Avoidance of catheter manipulation or contamination.
- Preservation of device integrity.

A safe dissection plane was maintained by modifying the standard trocar layout to respect anatomical alterations

Results

- Trocar positioning successfully avoided contact with the catheter.
- No intraoperative or postoperative complications occurred.
- The dialysis catheter remained functional and uncontaminated.
- The procedure was completed without conversion or compromise in technique.

Conclusions

- TEP hemioplasty remains a feasible and safe option in patients with complex abdominal anatomy due to scarring or indwelling devices.
- Tailoring trocar positioning is essential for preserving catheter integrity and minimizing surgical risk.
- Operating in the preperitoneal space does not inherently increase infection risk when adequate spatial separation from the catheter is ensured.
- This approach is effective and reproducible for select patients requiring inguinal hernia repair with a coexisting peritoneal dialysis catheter.

Contact: jzabala@torrejonsalud.com