

VIDEO

Totally extraperitoneal approach for ventral hernia

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Abstract

Background In open surgery, extraperitoneal sublay mesh implantation is generally preferred to intraperitoneal placement, following the same principles as in “giant prosthetic reinforcement of the visceral sac” described for inguinal hernia repair [1, 2]. Miserez and Penninckx in 2002 described an endoscopic totally preperitoneal ventral hernia repair in a small cohort of 15 cases [3]. Unfortunately, this technique has not spread, probably because of the technical difficulties that require, but not for effectiveness.

Methods This video demonstrates the detailed operative technique and feasibility for performing extraperitoneal mesogastric hernia repair endoscopically. After insufflation of CO₂ in Retzius space, 3 trocars were introduced on semilunar line once identified the correct retromuscular plane. Blunt dissection was done up to midline. Above arcuate line, linea alba was incised in order to open the contralateral posterior rectus sheath and dissection proceeded laterally until the contralateral semilunar line. Hernia sac was reduced and the defect of posterior rectus sheath and peritoneum was closed with continuous suture. A composite mesh was placed without fixation.

Results Operative time was 150 min without blood loss. Interruption of pain medication was in the first post operative day and discharge in second post operative day. One

week after surgery, an ultrasound assessment was done to evaluate presence of seroma.

Conclusions Although this approach will not become the gold standard, certainly it presents some innovative elements such as non-exposure of the mesh with the abdominal viscera and the improvement of the comfort avoiding fixing system such as tacks. Comparison between the current endoscopic techniques is required. Totally extraperitoneal (TEP) approach for ventral hernia is safe and feasible.

Keywords TEP repair · Ventral Hernia · Endoscopic · Retromuscular · Extraperitoneal

Compliance with ethical standards

Conflict of interest Sante Capitano has no conflicts of interest or financial ties to disclose.

References

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Electronic supplementary material The online version of this article (doi:10.1007/s00464-017-5761-0) contains supplementary material, which is available to authorized users.

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