

Parastomal hernia repair using Pauli's technique (with video)

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Title: Parastomal hernia repair using Pauli's technique (with video)

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Parastomal hernias are a common complication after stoma creation, with an incidence ranging from 4 to 48% in the literature. About thirty-five percent of them are also associated with medial incisional hernias ¹. Parastomal hernias decrease patient's quality of life in different ways including chronic pain, difficulties for stoma appliances, or mechanical complications with bowel obstruction. The risk for severe complications after surgery for parastomal hernias ranges from 20 to 60% including a high incidence of hernia recurrence that could reach 60% in some series. Numerous surgical procedures have been described to avoid those complications and the risk for recurrence. This video showed a parastomal and medial incisional hernias repair using Pauli's technique which was described in 2016 ². This procedure was associated with a ureteral reimplantation. Indeed, this patient presented a parastomal hernia complicating a Bricker's ileal conduit with a left ureteral stenosis leading to a chronic infection of the urinary tract. This video showed the different steps necessary to perform a parastomal hernia repair using Pauli's technique. An extended adhesiolysis was performed to release abdominal viscera from the parietal walls but also the ileal conduit. Then, the left ureter reimplantation was performed on the ileal conduit and controlled using methylene blue solution. The incisional and parastomal hernia's repair began with a retromuscular dissection in order to isolate the posterior aponevrosis of rectus muscles (Figure 1). This dissection was extended on both sides up to the transversus abdominis muscle insertion, that was incised according to the Transversus Abdominis Release (TAR) technique (Figure 2). This maneuver allowed to increase the posterior wall length, and then the abdominal volume for the hernia reduction of intra-abdominal contents. Next, the posterior stoma's orifice was lateralized according to the Sugarbaker's method (Figure 3). This allowed the surgeon to create a double bend within the abdominal wall in order to reduce this weakness area. Then, the mesh was placed folded with its non-adherent side against the stoma to strengthen the abdominal wall (Figure 4). The mesh was not split and created a sling around the stoma as described by Pauli et al. to protect the digestive tube from the mesh crude edges. The surgical site was considered as potentially contaminated and needed an antibioprophylaxy. The surgical procedure was terminated by the suture of the remaining anterior layers and abdominal wall. This video will be usefull for all digestive surgeons having to manage patients with parastomal hernias.

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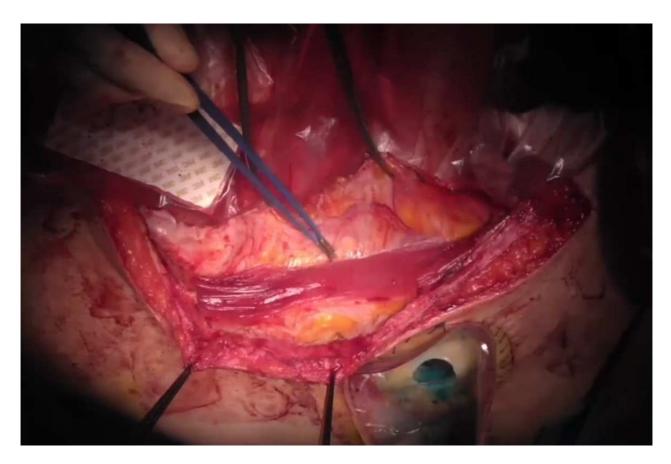


Figure 1 Retromuscular dissection

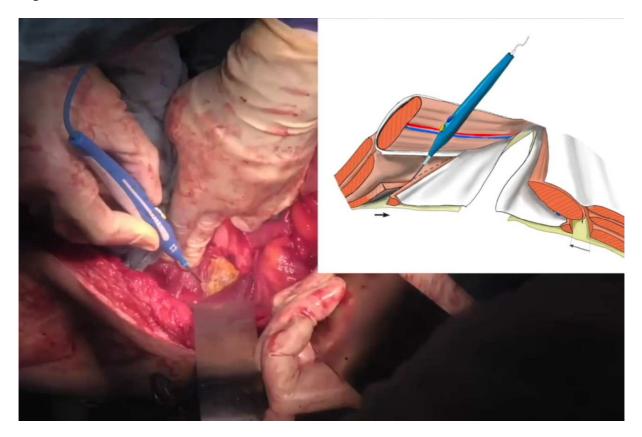


Figure 2 Transversus Abdominis Release (TAR)

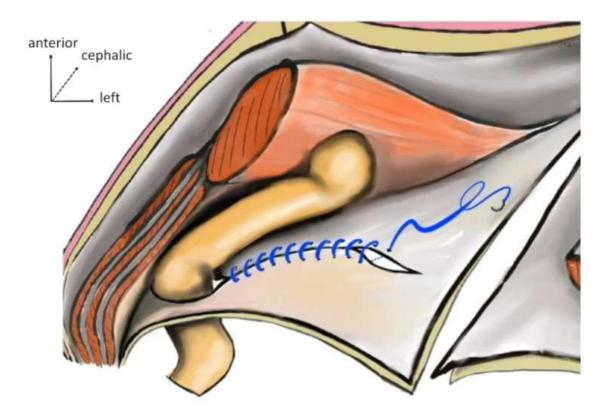


Figure 3 Posterior's orifice lateralization following Sugarbaker's method, double bend pathway for the stoma.

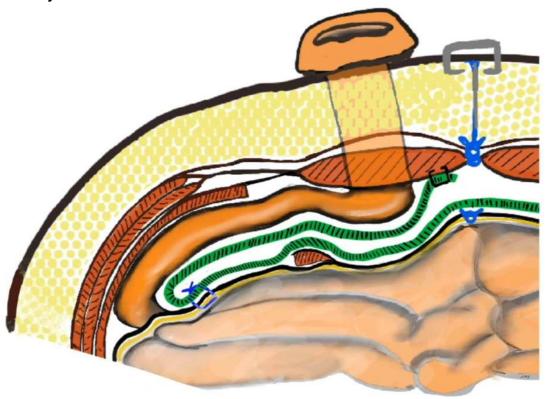


Figure 4 Transversal view showing the mesh's positioning, the non-adherent side folded against the ileal conduit.