



Single center experience in performing 37 Pauli procedures over 5 years

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Laparoscopic repair of ileal conduit hernia

S-shaped passage of the stoma through the anterior and posterior fascia

Mesh placement

Pauli distribution in 5 years

Aim: In the past years, we have consistently developed the use of robotic Pauli technology (rPauli) and report here on our experience with the transformation to robotic technology.

Material and Methods: In the period from 2019 to 2024, 37 Pauli procedures were performed for parastomal hernias (ileum conduit (n=23), colostomy (n=12), enterostomy (n=2)). Minimally invasive treatment (MICPauli; n=30) was performed robotically (rPauli, n=18) and laparoscopically (lPauli, n=12). Open Pauli surgery (oPauli) was performed in 7 cases.

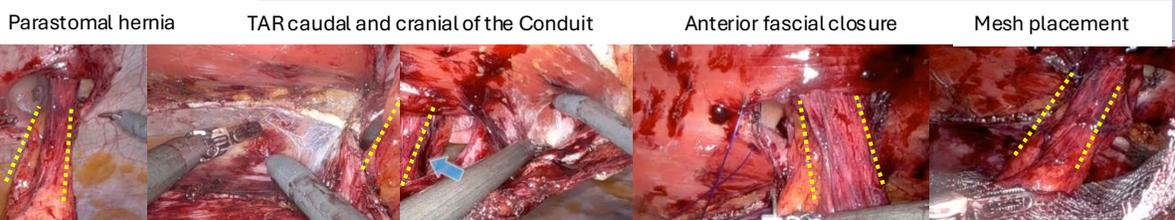
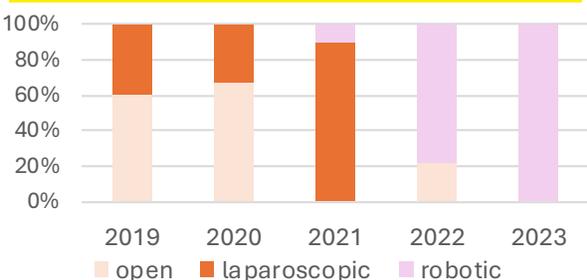
Results: The comparison of MICPauli vs. oPauli showed a mean operation time of (243 vs. 221 minutes; n.s.) and a mean hospital stay of (3.8 vs. 5.4 days; p<0.01). In the subgroup comparison laparoscopic vs. robotic, there was no significant difference. In 2019 (n=5 procedures) the portion of rPauli was 0% and increased to 100% in 2024 (n=10 procedures). The mean hernia size was 29 cm² and the mean mesh size was 277 cm². With a caudal U-shaped incision, we protect the bowel at the medial margin and create wings to enlarge the posterior fascial overlap. Postoperative complications were rare Clavien-Dindo 0 (84%). One patient died of pulmonary embolism on the 2nd day after rPauli when mobilized into the bathroom.

Conclusion: The data show that MICPauli can be performed with a shorter hospital stay than oPauli. In our opinion, the robotic technique should be used as the standard, but the open surgical technique should also be mastered.

No measurable/significant difference between laparoscopy and robotic

	lPauli (n=12)	rPauli (n=18)
Duration of surgery (min)	235	248
Length of hospital stay (days)	4	4
Clavien-Dindo (portion of CD-0)	11/12	16/18

Migration to 100% robotic !



Tips & Tricks: The preservation of the hernia sac in place is our concept although it often leads to postoperative seroma. The waterproof fixation of the stoma system above the bulging seroma is easier than on a wrinkling (due to suturing of the sac) skin. By time, the seroma will be resorbed.

