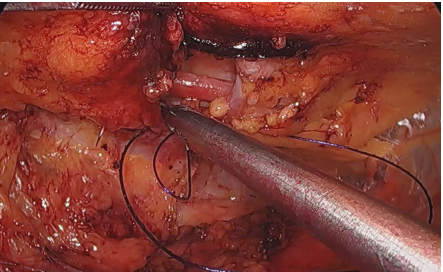
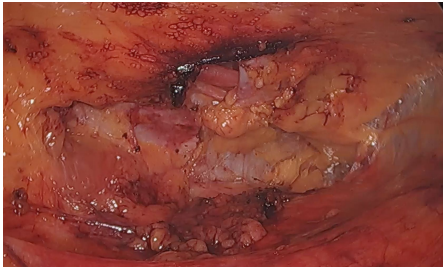
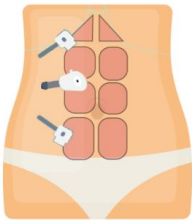


Totally Extraperitoneal Approach for L4 Incisional Hernia Repair.
Technique Description and Our Experience

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Objective: To describe our experience and technique in the repair of L4 incisional hernias using the totally extraperitoneal (eTEP) approach.

Materials and Methods: A descriptive analysis was conducted based on a retrospectively collected database. The standard surgical technique is performed with the patient in lateral decubitus, introducing the first trocar under direct vision, lateral to the umbilicus, between the transversus muscle and the peritoneum or transversalis fascia. The pretransversalis space is then dissected, and two 5 mm working trocars are placed. In cases involving the midline, the entry is made through the contralateral rectus sheath.



I	2	15,4%
II	7	53,8%
III	4	30,8%
IV	0	0,0%

Table 1: ASA score

Results: A total of 13 patients were operated on between 2019 and 2024. Of these, 84.6% were women. Hypertension was the most common comorbidity (38.5%), followed by diabetes, heart disease, and chronic obstructive pulmonary disease, each at 15.4%. The median BMI was 29.83. All patients underwent surgery for incisional hernia, with only one being a recurrence. A total of 69.2% (9 patients) were classified as W2, with two W1 and two W3 patients (see table 2 and 3). No patients received botulinum toxin. Intraoperative times and meshes dimensions are described in table 4 and 5. The median pain score (VAS) on the first postoperative day was 3, and 2 at discharge, with a median hospital stay of 1 day. No complications or recurrences were observed in our series.

		N	%
Incarcerated	No	10	76,9%
	Yes	3	23,1%
W	1	2	15,4%
	2	9	69,2%
	3	2	15,4%

Table 2: CT-scan hernia EHS

	Median	Min	Max
Number of defects	1	1	3
Width (mm)	71	24	114
Height (mm)	60	23	129

Table 3: Preoperative CT-scan hernia measures

	Median	Min	Max
Trocar placement	10	2	19
Suture	15	4	27
Total	79	45	195

Table 4: Operative time

	Median	Min	Max
Mesh height (cm)	20	9	30
Mesh width (cm)	15	9	30

Table 5: Mesh measures

Conclusions: The eTEP approach is a safe technique with good success rates. Large incisional hernias can be repaired with adequate mesh overlap without the need to access the posterior rectus sheath or perform systematic TAR to reach the pretransversalis space in those L4 hernias without midline defects.