Marks Colorectal Surgical Research Foundation

What is The Rate of Incisional Hernia?

Analysis of Initial 100 Single-Port Robotic Colorectal Procedures

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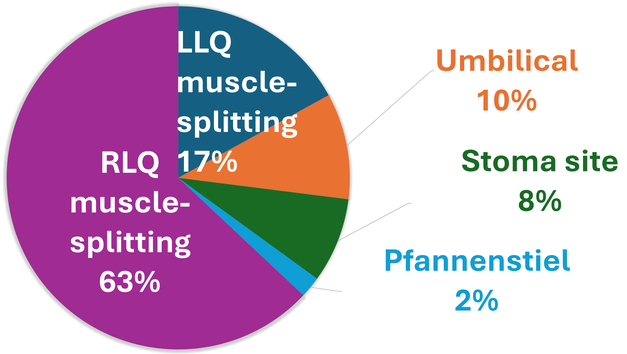
Purpose

- Single-Port robotic (SPr) colorectal surgery is now an option.
- Questions exist regarding incisional hernia rates due to the greater SPr trocar size.

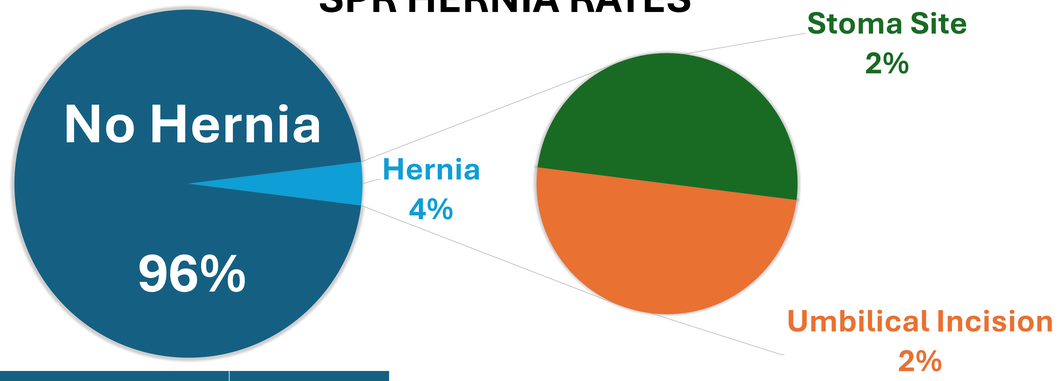
Methods

- First 100 consecutive SPr colorectal procedures were analyzed.
- Hernias identified through blinded imaging review and clinical examination and compared by incision site.

SPR INCISION LOCATION



SPR HERNIA RATES



Patient Demographics:	No Hernia (n = 96)	Hernia (n = 4)	p-value
Age [years], Mean (range)	58.6 (22 – 84)	67.3 (52 – 74)	.15
Female, N (%)	62 (64.6)	4 (100)	.29
BMI [kg/m^2], Mean (range)	26.7 (16.9 – 42.6)	29.4 (21.8 – 36.1)	.29
Maximal incision size [cm], Mean (range)	4.84 (2.5 – 8.0)	4.8 (4.4 – 5.5)	.91
Follow-up [months], N (%)	14.9 (1.0 – 69.7)	28.3 (11.7 – 48.1)	.12
ASA Classification, N (%) Class I Class II Class III	 2 (2.1) 63 (65.6) 31 (32.3)	 0 2 (50) 2 (50)	.48
Prior abdominal surgery, N (%)	37 (38.5)	3 (75)	.14

Discussion

- Low overall hernia rate (4%) after SPr colorectal surgery.
- Hernias only occurred at umbilical or prior stoma sites.
- No muscle-splitting incisions had a hernia.
- SPr trocar size alone did not increase hernia risk.