

Open Retromuscular Repair of Parastomal Hernias

Beffa LR, Carbonell AM², Cobb WS², Ewing JA, Knoedler BP⁴, Warren JA²

²USC School of Medicine, Greenville, Minimal Access and Bariatric Surgery. ⁴Furman University



GREENVILLE
HEALTH SYSTEM

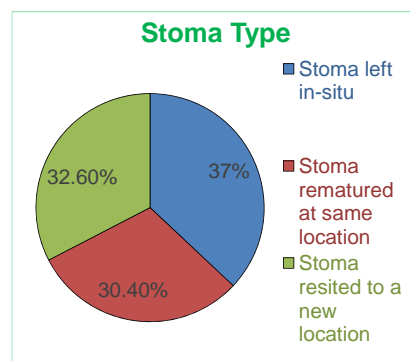
Background

- Purpose: To evaluate the outcomes of retromuscular parastomal hernia repair with permanent synthetic mesh.
- A parastomal Hernia (PH) is defined as an incisional hernia related to an abdominal wall stoma.
 - A common and dreaded complication of enterostomy procedures.
 - Reported incidence as high as 50%.
- Recurrence after mesh repair remains as high as 32% in long-term follow-up.
- Meaningful interpretation of the hernia literature is difficult.
 - Innumerable combinations of surgical approach, operative technique, mesh selection, mesh fixation method, mesh position and perioperative management.

Methods

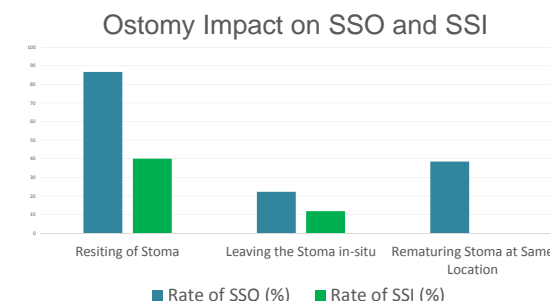
- A prospectively maintained hernia database was reviewed to identify patients undergoing parastomal hernia repair.
- Primary outcomes: Surgical Site Occurrence (SSO), Surgical Site Infection (SSI), and hernia recurrence.
- Discrete variables analyzed using Pearson's chi-square test or Fisher's exact test. Values of $p < 0.05$ were considered significant.

Demographic	Prevalence, no. (%)
Study Population:	n=46
Average Follow-up	21.5 months
Range of Follow-up	1 – 75 months
Average BMI	29 kg/m ²
Colostomy	26 (56.5)
Ileostomy	20 (43.5)
TAR Utilization	30 (65.2)



Findings

	N (%)
SSO	22 (47.8)
SSI	8 (17.4)
Recurrent PH	10 (21.7)



Mesh	Prevalence, no. (%)
Macro-porous, mid-weight, polypropylene	44 (95.7)
Small-pore, mid-weight, polypropylene	2 (4.3)

Discussion

- Open retromuscular parastomal hernia repair with permanent synthetic mesh is safe, with recurrence and complication rates comparable to other reported outcomes.
- Further evidence of the safety of permanent synthetic mesh in contaminated cases, particularly in the retromuscular space
- No difference in SSO or SSI with respect to stoma type or with the addition of a TAR.
- The disposition of the ostomy had a significant impact on SSO and SSI
- No difference in recurrence relative to the disposition of the ostomy.
- Need for further follow-up studies

References:

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4. Burger J, Luijendijk RW, Hop W, Halm JA, Verdaasdonk EG, Jeekel J. Long-term follow-up of a randomized controlled trial of suture versus mesh repair of incisional hernia. *Ann Surg*. 2004; 240: 578-93.