

Staple Line Reinforcement in Laparoscopic Roux-en-Y Gastric Bypass: GORE SEAMGUARD® Bioabsorbable Staple Line Reinforcement or Peri-strips



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Introduction

Staple line reinforcement is commonly used to decrease bleeding during gastric bypasses

- Two main products: Peri-strips® (Synovis Surgical) and GORE SEAMGUARD® Bioabsorbable Staple Line Reinforcement (W.L. Gore)
- Peri-strips are nonabsorbable while SEAMGUARD product is bioabsorbable
- Our aim is to determine whether one product has improved outcomes over the other in laparoscopic Roux-en-Y gastric bypass patients

Methods

- A prospectively collected database of all patients who had their gastric pouches created with Peri-strips were compared to the same number of consecutive patients who had SEAMGUARD product used
- The gastrojejunostomy was created by a 2-layer hand-sewn anastomosis
- Post-operative outcomes were tracked for 12 months
- The chi-squared method was used to compare complications associated with the gastric pouch

Results

- Peri-strips were used in 118 patients from Nov. 2002 - Nov. 2003
- SEAMGUARD product was used in 118 patients from Dec. 2003 - Aug. 2004
- No re-operations or post-operative transfusions in either group
- One death occurred during this time period from a pulmonary embolus

Table 1. Patient Characteristics

	Peri-Strips	SEAMGUARD product
Age	43	44
BMI	49.9	50.7
Co-morbidities	5.8	5.5

Table 2. Comparison of Complications

	Peri-strips	SEAMGUARD product	p Value
Leaks*	0	1	= 0.32
Nausea/Vomiting	3	8	= 0.12
Erosion	6	0	= 0.01

*Subclinical leak not requiring re-operation or drain placement

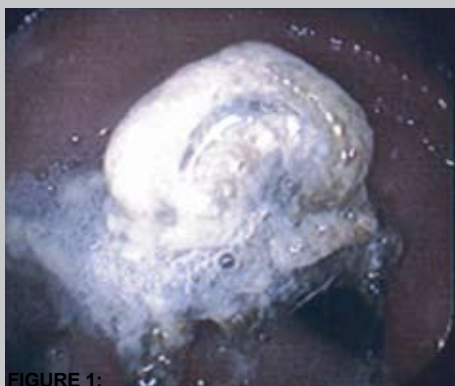


FIGURE 1:
Eroded Peri-strips seen on endoscopy at gastrojejunostomy



FIGURE 2:
Gastrojejunostomy after endoscopic removal

Discussion

- No significant bleeding was noted in patients with either staple line reinforcement used during the gastric pouch creation
- Peri-strips eroded in 5% of patients, which was statistically significant
- SEAMGUARD product is preferable to Peri-strips in gastric bypass patients because it does not erode

Poster Presented at SAGES 2007 Annual Meeting

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