Open Retromuscular Repair of Parastomal Hernias

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.

Findings

- 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

Demographic Prevalence, no. (%)

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<tr>
<th>Study Population: n=46</th>
<th>Average Follow-up 21.5 months</th>
<th>Range of Follow-up 1 – 75 months</th>
<th>Average BMI 29 kg/m²</th>
<th>Colostomy 26 (56.5)</th>
<th>Ileostomy 20 (43.5)</th>
<th>TAR Utilization 30 (65.2)</th>
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Mesh Prevalence, no. (%)

| Macro-porous, mid-weight, polypropylene | 44 (95.7) |
| Small-pore, mid-weight, polypropylene | 2 (4.3) |

References: