Systematic review and meta-analysis of surgical interventions for high cryptoglandular perianal fistula. [Review]

Authors: Gottgens KW, Smeets RR, Stassen LP, Beets G, Breukink SO

Publication Date: 2015

Abstract:

PURPOSE: Perianal fistulas, and specifically high perianal fistulas, remain a surgical treatment challenge. Many techniques have, and still are, being developed to improve outcome after surgery. A systematic review and meta-analysis was performed for surgical treatments for high cryptoglandular perianal fistulas.

METHODS: Medline (Pubmed, Ovid), Embase and The Cochrane Library databases were searched for relevant randomized controlled trials on surgical treatments for high cryptoglandular perianal fistulas. Two independent reviewers selected articles for inclusion based on title, abstract and outcomes described. The main outcome measurement was the recurrence/healing rate. Secondary outcomes were continence status, quality of life and complications.

RESULTS: The number of randomized trials available was low. Fourteen studies could be included in the review. A meta-analysis could only be performed for the mucosa advancement flap versus the fistula plug, and did not show a result in favour of either technique in recurrence or complication rate. The mucosa advancement flap was the most investigated technique, but did not show an advantage over any other technique. Other techniques identified in randomized studies were seton treatment, medicated seton treatment, fibrin glue, autologous stem cells, island flap anoplasty, rectal wall advancement flap, ligation of intersphincteric fistula tract, sphincter reconstruction, sphincter-preserving seton and techniques combined with antibiotics. None of these techniques

seem superior to each other.

CONCLUSIONS: The best surgical treatment for high cryptoglandular perianal fistulas could not be identified. More randomized controlled trials are needed to find the best treatment. The mucosa advancement flap is the most investigated technique available.