

Do Patients with Scleroderma Benefit from Surgical Treatment for Gastroesophageal Reflux?

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Introduction: Gastroesophageal reflux (GERD) is common in patients with scleroderma that may be complicated by esophagitis, strictures, and Barret's esophagus. Anti-reflux medications are still considered the first line treatment of GERD in SSc patients. Surgical treatment is usually preserved for reluctant cases. We conducted this meta-analysis to assess for the benefit of surgery in treating GERD in SSc patients.

Methods: A comprehensive literature search of PubMed, Embase, and Web of Science databases was conducted through June 01, 2022. We included all studies that assessed for the outcomes of surgical treatment of GERD in SSc patients. We calculated pooled odds ratios (OR) for the outcomes that were reported in ≥ 3 studies using a random-effects model.

Results: A total of 142 patients with SSc who underwent surgical treatment of GERD were included in nine studies. Persistence of dysphagia and acid reflux symptoms were used to assess for the outcomes of surgery as they were reported in ≥ 3 studies. Our meta-analysis showed that there is about 61.5% decrease in dysphagia after surgery with an OR of 0.385 (0.250, 0.541). Our study also showed a 26% decrease in acid reflux symptoms after surgery with an OR of 0.741 (0.484, 0.897)

Conclusion: The treatment of refractory GERD in patients with SSc remains challenging. Our study showed that surgery has been associated with lower rates of dysphagia and acid reflux. However, further studies should be conducted to assess for the definitive indications, and the adverse outcomes of surgery in SSc patients.