## PNEUMATIC BALLOON DILATION FOR PALLIATION OF RECURRENT SYMPTOMS OF ACHALASIA AFTER ESOPHAGOMYOTOMY

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## **GENERAL SURGERY**

**INTRODUCTION:** Achalasia is a chronic disease affecting the myenteric plexus of the esophagus and lower esophageal sphincter. Treatment focuses on palliating symptoms to improve quality of life. Many options exist for treatment of relapse after esophagomyotomy. We treat symptom relapse with pneumatic balloon dilation (PBD). Data on the safety and efficacy of PBD for recurrent symptoms is scarce. Our experience over the last decade is reviewed.

**METHODS:** A retrospective review of patients who underwent PBD for recurrent symptoms of achalasia after esophagomyotomy from 2007 – 2017 was performed. PBD was performed at 3, 3.5, and 4 cm and held for 60 seconds under fluoroscopic guidance. Patients with residual symptoms were dilated at the greater diameters. Primary outcomes were complications and reintervention (PBD, esophagomyotomy, or esophagectomy). Eckardt scores prior to PBD, age, BMI, and ASA class were also reported. Data is presented as median and interquartile range (IQR).

**RESULTS:** One-hundred-four esophagomyotomies and 4 re-dos were done. Fourteen patients (50% male) underwent PBD for recurrent symptoms. Median age was 59 (IQR=24.3), BMI was 26 (IQR=7.4), ASA was 2 (IQR=0), and Eckardt score was 6 (IQR=1.0). Median time to recurrence of symptoms following esophagomyotomy was 28 months. Twenty-two PBDs were done. Seven patients required dilation at 3.5 cm and 2 patients at 4 cm. Eleven patients had symptom improvement requiring no further intervention after PBD. Of the 3 treatment failures, 1 had repeat esophagomyotomy and 2 had no further treatments. There were no complications for any of the 22 PBDs.

**CONCLUSION** – Serial PBD is safe and effective for recurrent symptoms of achalasia following esophagomyotomy.