Endoscopic Management of Cricopharyngeal Hypertrophy, an Analysis of 136 Cases

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Abstract

Although dating back to the records of Dr. Abraham Ludlow in 1767, the issue of cricopharyngeal muscle hypertrophy or upper esophageal sphincter achalasia has only recently entered the limelight of management controversy.

Methods

A review of 136 patients at the Mayo Clinic in Arizona who underwent a CP myotomy independent of other head and neck procedures (ie: laryngectomy) were evaluated. Patients were treated between January 2002 and August 2011.

Results

- Median hospital stay was one day.
- Of 60 postoperative swallow studies showed complete resolution of hypertrophy/diverticulum.
- Ten of 136 patients complained of recurrent symptoms: 10 of 136 patients complained of recurrent symptoms: 6/10 had an average preoperative diverticulum of 4.3 cm (cranial-caudal axis measurement). Average diverticulum size was 4.5 cm in laser cases and 2.6 cm in all others (p=0.06)
- Laser incision size (average 8.6 mm) was larger than for patients not requiring revision (2.6 cm).
- Eleven minor complications occurred, most commonly a pharyngeal mucosal tear which did not require further treatment. One major complication occurred, requiring operative management.

Conclusions

- Endoscopic myotomy alone effectively cures the Zenker’s diverticulum in 90% of cases.
- Likelihood of requiring revision surgery is higher if patient presents with a large diverticulum. (>4cm)
- Symptom recurrence is directly related to diverticulum size.
- Most complications are minor and do not require operative intervention.
- In addition to other commonly used treatment modalities, endoscopic CP myotomy is a safe, predictable, effective treatment for CP hypertrophy with or without a Zenker’s diverticulum.

References