

Unexpected Endoscopy Findings: Rare Presentation of a Double Lumen Esophagus in a 25-year-old Male with Eosinophilic Esophagitis

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UNIQUE ASPECTS

- A rare case involving a 25-year-old male with a history of Eosinophilic Esophagitis (EoE) who presented with dysphagia and heartburn. Upon examination with EGD, findings demonstrated a double lumen esophagus (DLE) with visible proximal and distal openings.
- To our knowledge, there has been only one other case in the literature of such a unique presentation with an association to EoE. We believe this to be the only reported case of the association in a young adult male with normal barium esophagram.

CLINICAL SCENARIO

- A 25-year-old male presented to clinic with dysphagia and heartburn. He was given a diagnosis of EoE one month prior after a hospital visit for food bolus. Physical exam was unremarkable aside from an underweight BMI of 18.2.
- Prior to treatment, the patient had chest tightness three times weekly. He was placed on Flovent therapy for 4 weeks with improvement of symptoms to once weekly. He proceeded with EGD with biopsy 12 weeks later to assess therapy effectiveness.
- EGD findings of ringed esophagus and longitudinal furrow were found. Additional findings consisted of a small opening in the middle third of the esophagus (**Figure 1**) that tunneled through the wall and opened back up into the true lumen 3cm distally (**Figure 2**).
- He underwent a barium esophagram which showed no acute esophageal abnormality. Pathology later resulted as squamous mucosa without histopathologic abnormality at both the proximal and distal sites, confirming therapy as effective.



Fig. 1: Endoscopic view of the proximal opening in the esophagus



Fig. 2: Endoscopic view of the distal opening in the esophagus

LITERATURE REVIEW

- DLE is a rare endoscopic finding, that describes a true and false lumen in the esophagus separated by a septum [1].
- The underlying cause is unknown but has been previously reported as a complication to NG tube insertion or associated with other uncommon conditions (i.e. esophagitis dissecans superficialis) [2].

CONCLUSIONS

- A DLE should be considered a possible complication of EoE, especially in patients presenting with dysphagia, food impaction, heartburn, thoracic pain, and weight loss.
- It should be made aware that this can be missed on Barium esophagram given our patients normal results. Endoscopists should carefully examine the esophagus and not rule out possibilities of DLE in this scenario.
- Due to the rarity of this presentation, management is not clear. However, since the patient's symptoms improved after treatment of EoE, no further treatment is warranted at this time.
- Regular patient follow up for monitoring is recommended and further work up or treatment of the DLE with septectomy could be warranted especially if symptoms return or future food impactions or obstructions occur [1,2].

REFERENCES

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