

The Role of Esophageal Inlet Patch and Linear IgA Disease in Upper Airway Stenosis: A Clinical Case Study

AUTHORS

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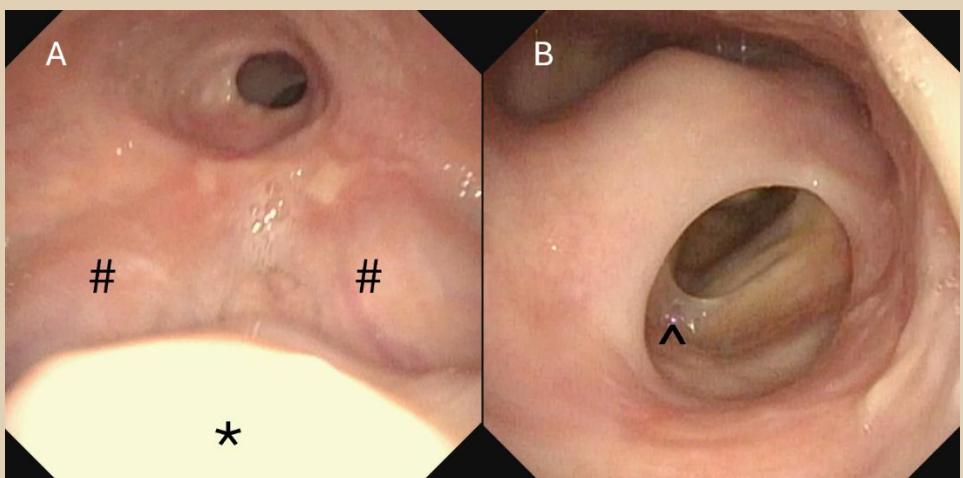


Introduction

- Inlet patch (IP) = abnormal area of heterotopic gastric mucosa located at or below the upper esophageal sphincter
- Generally asymptomatic but may cause dysphagia, esophagitis, stricture, and more severe upper airway disease
- This case report presents the first case of inlet patch associated with supraglottic stenosis and linear IgA disease

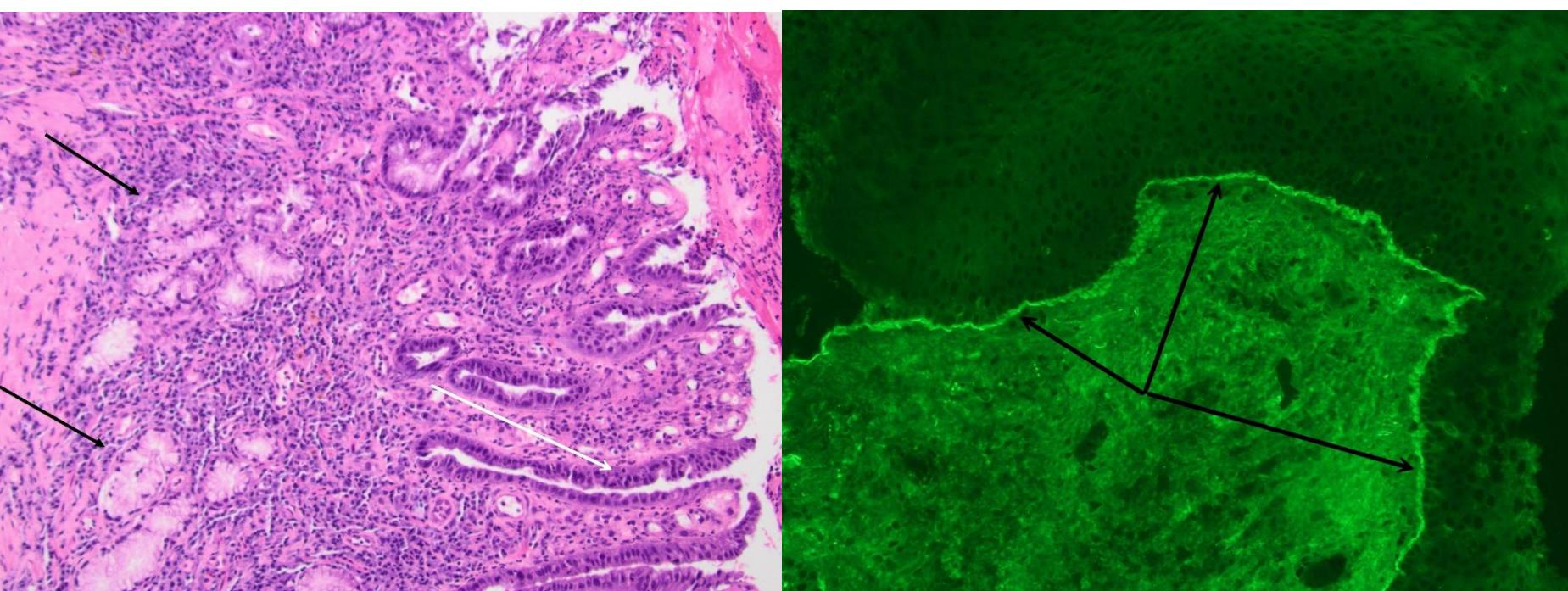
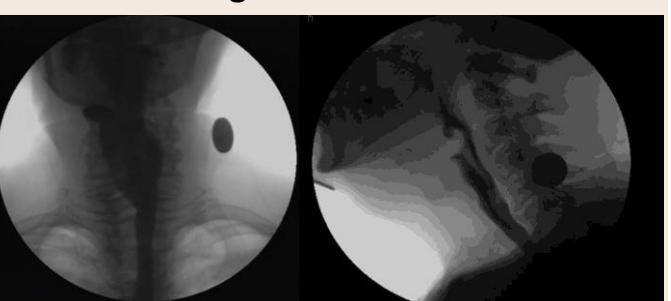
History and Physical

- 74 y/o female presenting with mild dyspnea, intermittent throat pain, dysphagia for solids
- Sensation of throat burning after eating chocolate or tomato-based sauces specifically
- Past medical hx: hiatal hernia with repair, multiple esophageal stricture dilations, CAD s/p CABG, DM
- Family hx: esophageal stenosis in mother and several siblings requiring repeat dilations



Management

- Patient underwent direct laryngoscopy with jet ventilation, CO₂ laser ablation, and balloon dilation to open the stenosis for breathing and swallowing
- Raised salmon colored mass in the cervical esophagus identified and removed → cervical inlet patch confirmed on pathology
- Postoperatively required emergency procedure to remove fibrous clot partially obstructing airway, stable after overnight stay in SICU with immediate improvement in breathing and swallowing
- Postoperative modified barium swallow with partially revealed epiglottis but still having penetration of thin liquids
- One month follow up: tolerating regular diet with significant symptom improvement, taking Dexilant and famotidine for potential residual effects of IP but no changes on laryngoscopy
- Three month follow up: mild recurrence of scarring in the hypopharynx and supraglottis
- Repeat procedure with CO₂ laser ablation, balloon dilation, and steroid injection → biopsies taken from stenotic areas showed inflammatory infiltrate and granulation tissue, linear IgA deposition along basement membrane consistent with linear IgA disease (LAD)
- Intervention free for 18 mo with minor touch up procedure for mild swallow changes due to limited scar recurrence



Discussion

- IPs have been associated with chronic cough, hoarseness, esophagitis, esophageal strictures, and dysphagia when symptomatic, but has been linked to laryngeal pemphigus and SCC due to repeated acid exposure^{1,2}
- LAD: autoimmune mucocutaneous disease characterized by IgA Ab targeting self-antigens in basement membrane of epithelial tissues³
- LAD has been described in association with fatal laryngeal scarring and stenosis but no evaluation for IP in case report⁴
- GERD associated with glottic scarring → increased acid exposure in the upper airway from acid produced by the IP may have promoted scarring with resulting stenosis⁵
- Presentation suspicious for upper digestive pemphigoid or LAD may benefit from esophagoscopy with narrow band imaging for earlier detection of IP → removal may help prevent formation and recurrence of airway/esophageal stenosis
- Increased research regarding the relationship between IPs, autoimmune mucocutaneous disease, and airway stenosis needed to better understand how these disease affect the development of one another

References

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