

Odynophagia Related with Cervical Inlet Patch: A Case Report

A Sarhani*, S Ghani, M Salihoun, M Acharki and N Kabbaj

EFD-HGE, Universal Hospital Ibn Sina - UM5S, Rabat, Morocco

***Corresponding Author:** A Sarhani, EFD-HGE, Universal Hospital Ibn Sina - UM5S, Rabat, Morocco.

Received: July 07, 2020; **Published:** August 29, 2020

Abstract

An inlet patch (IP) or heterotopic gastric mucosa (HGM) is a congenital anomaly largely asymptomatic presented as an area of heterotopic gastric mucosa most commonly located in the postcricoid portion of the esophagus. The diagnosis of IP is confirmed by endoscopy with biopsies. Histopathology provides the definitive diagnosis by demonstrating gastric mucosa adjacent to normal esophageal mucosa.

This is a case report of a 30-year-old patient, who presented repetitive odynophagia with occasional epigastralgia. Upper digestive endoscopy revealed two red rounded lesion at the cervical esophagus corresponding to cervical Inlet Patch by histopathologic examination. The patient was treated with proton pump inhibitors according to a clinicopathologic classification.

Keywords: *Inlet Patch; Cervical Esophagus; Odynophagia*

Abbreviations

CIP: Cervical Inlet Patch; IP: Inlet Patch; HGM: Heterotopic Gastric Mucosa; PPIs: Proton Pump Inhibitors

Introduction

The cervical inlet patch (CIP), is an island of heterotopic gastric mucosa mostly situated in the post-cricoid portion of the esophagus just beneath or at the upper esophageal sphincter. The diagnostic is usually not easy.

Schmidt was first to describe this lesion as an incidental finding of aberrant gastric epithelium located in the cervical esophagus and separated from the gastroesophageal junction [1]. Foxen reported the first case of dysphagia due to inlet patch (IP) in the cervical esophagus [2]. Since then, several reports have linked upper esophageal IP with various symptoms [3,4]. These symptoms are caused by acid secretion from ectopic gastric tissue [5].

We report a case of symptomatic IP in the cervical esophagus. The clinical presentation and management of this infrequently reported are discussed with a review of the literature.

Case Presentation

This is a 30-year-old patient, who presented odynophagia with occasional epigastralgia. There was no associated dysphonia or dysphagia. The patient was operated for interauricular communication at the age of 2 years and suffers from congenital mental retardation.

Clinical examination of neck, oropharynx, larynx and abdomen didn't show anomalies. Laboratory studies were normal. Upper digestive endoscopy under Propofol sedation revealed an esophagitis stage A of Los Angeles and two red rounded (2 cm) lesions, at the cervical esophagus (12 - 16 cm of the dental arches) occupying two thirds of the circumference (Figure 1).

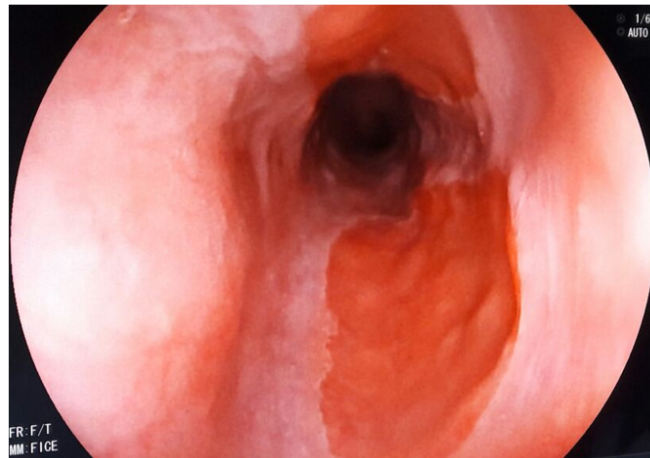


Figure 1: Endoscopic image of Cervical Inlet Patch in upper esophagus.

Histopathologic examination biopsies taken from esophageal lesions revealed an esophageal mucosa bordered by a regular squamous epithelium adjoining antral mucosa containing well-differentiated regular glands, without dysplasia or metaplasia (Figure 2 and 3). Histopathologic examination of gastric biopsy showed chronic gastritis. *H. pylori* was negative.

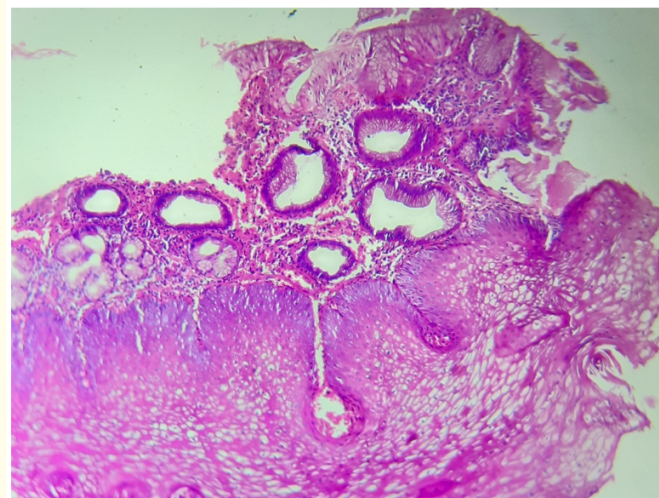


Figure 2: Photomicrograph showing a typical cervical inlet patch formed by esophageal mucosa lined with stratified squamous epithelium and adjacent heterotopic gastric mucosal glands (x100).

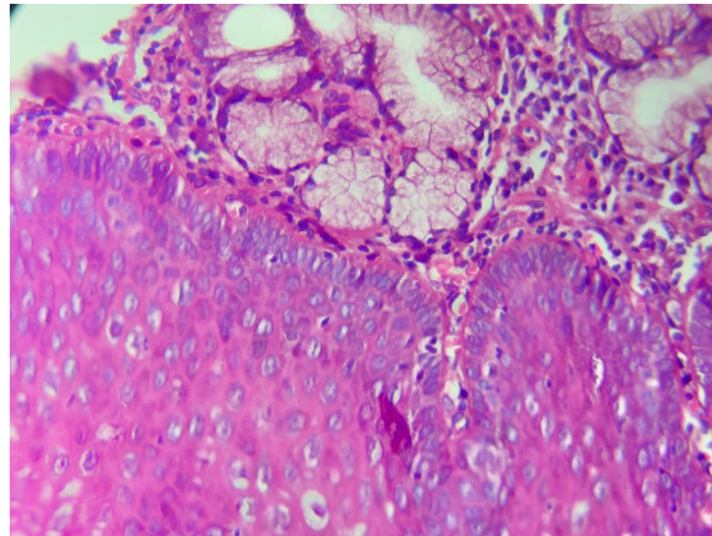


Figure 3: Photomicrograph showing a typical cervical inlet patch in high power ($\times 400$).

A diagnosis of cervical inlet patch was made, with no evidence of malignancy or dysplasia. The patient was treated symptomatically with proton pump inhibitors (PPIs) with good clinical evolution. The patient is currently asymptomatic, he is regular follow-up.

Discussion

The cervical inlet patch (CIP), is an island of heterotopic gastric mucosa mostly situated in the post-cricoid portion of the esophagus just beneath or at the upper esophageal sphincter. In various endoscopic published studies CIP incidence ranges from 0.1% to 13%, whereas autopsy reports have reported the incidence of up to 70% [6].

Most inlet patches are solitary and extend longitudinally. They tend to be small if they are multiple [7]. In our case, we have described them as two red rounded lesions about 2 cm occupying two thirds of the circumference.

Patients with CIP are mostly asymptomatic, however, acid secretion can produce complications such as stricture, ulcer, esophagitis, and web. Those complications may produce symptoms of throat pain, shortness of breath, dysphagia, odynophagia, globus sensation, and shortness of breath [8]. In our case, the patient presented repetitive odynophagia, the presence of the patches in close proximity to the larynx and pharynx (12 - 16 cm of the dental arches) can explain this rare symptomatology.

The CIP in our patient was grade II according to the proposed clinicopathologic classification (Table 1) [9].

The most common histological subtype described in literature is fundic mucosa, followed by cardia type mucosa. Rarely, histopathological examination of CIP shows a 'transitional' cell type with an arbitrary mixture of antral glands or an 'antral' pattern and fundic glands, with no chief cells and only a small number of parietal cells. The other histological anomalies of the CIP like metaplasia, atrophy, dysplasia and adenocarcinoma are rarely reported [10].

HGM I	Asymptomatic
HGM II	Symptomatic without morphologic changes (dysphagia/Odynophagia)
HGM III	Symptomatic with morphologic changes (benign complications: strictures, ulcers, webs, stenosis, fistula)
HGM IV	Intraepithelial neoplasia (dysplasia) (Low-grade/ high-grade)
HGM V Suffix	Invasive adenocarcinoma
a	Inlet patch (Macroscopically visible patch of HGM)
b	Microscopic foci (Only microscopically visible HGM)

Table 1: Clinicopathologic classification of esophageal HGM [9].

Symptomatic treatment with PPIs as well as patient insurance lead to a very good evolution in symptomatic patients without morphologic changes [11]. In our patient, there was no stricture or web formation and the cause of his symptoms were thought to be secondary to esophageal irritation from acid secretion. He responded well to treatment with a proton pump inhibitor.

Conclusion

The cervical inlet patch is an island of heterotopic gastric mucosa mostly situated in the post-cricoid portion of the esophagus. Esophageal and supraesophageal symptoms like odynophagia can be associated to this anomaly. We expect that this report will play a role in increasing the awareness of this heterotopic structure, and an astute pathologist should always raise biopsies of CIP.

Bibliography

- Schmidt FA. “De mammalium esophagus atque verticulo”. Inaugural dissertation, Halle, in office, Bathenea (1805).
- Foxen EHM. “Ectopic gastric mucosa in the cervical esophagus, a possible cause of dysphagia”. *Annals of Otolaryngology, Rhinology, and Laryngology* 92 (1983): 65-66.
- Schroeder WW, et al. “Ectopic gastric mucosa in the cervical esophagus”. *Laryngoscope* 97 (1087): 131-135.
- Gaillard J and Morgon A. “Evolution d’un ilot muqueux heterotopique de la bouche de l’oesophage”. *Journal Fr Otorhinolaryngol Audiophonol Chir Maxillofac* 21 (1972): 807-811.
- Hamilton JW, et al. “Symptomatic ectopic gastric epithelium of the cervical esophagus”. *Digestive Diseases and Sciences* 31 (1986): 337-342.
- Chong VH. “Clinical significance of heterotopic gastric mucosal patch of the proximal esophagus”. *World Journal of Gastroenterology* 19 (2013): 331-338.
- Day DW, et al. “Morson and Dawson’s Gastrointestinal Pathology”. 4th edition Malden, MA: Blackwell; (2003).
- Behrens C and Yen PP. “Esophageal inlet patch”. *Radiology Research and Practice* (2011): 460890.
- Von Rahden, et al. “Heterotopic gastric mucosa of the esophagus literature-review and proposal of a clinicopathologic classification”. *American Journal of Gastroenterology* 99 (2004): 543-551.

10. Rusu R., *et al.* "Cervical inlet patch: new insights into diagnosis and endoscopic therapy". *Frontline Gastroenterology* (2017); 1-7.
11. Sancheti Sankalp., *et al.* "A case of heterotopic gastric patch of cervical esophagus: Cervical inlet patch". *Journal of Cancer Research and Therapeutics* 11 (2015): 1047-1047.

Volume 7 Issue 9 September 2020

©All rights reserved by A Sarhani, *et al.*