Case report

Lobular capillary hemangioma of esophagus mimicking Barrett’s esophagus

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Abstract
A 30 year old male patient presented to the outpatient department of Gastroenterology with complaints of dyspepsia of 6 months duration associated with progressive dysphagia to solids and liquids. There was no noticeable loss of appetite but a history of loss of 8-10 kg weight was present. Occasional episodes of melena with pain abdomen were present. There was no response to medical treatment. On examination, the patient was thin built and pale. Endoscopy was done, which revealed nodular hyperemic mucosa seen circumferentially at the lower end of esophagus 35 cm from incisor teeth. A diagnosis of Barrett’s esophagus was made and biopsy was taken. Histopathology revealed lobular capillary hemangioma of esophagus. Immunohistochemistry with CD34 confirmed the diagnosis of lobular capillary hemangioma. Surgical resection of the lesion was done.

Key words: Lobular capillary hemangioma, esophagus, Barrett’s esophagus

Esophageal hemangioma is a very rare benign tumor of esophagus and can mimic malignancy. It can cause fatal complications like severe hemorrhage. Fewer than 100 cases have been reported in literature in which capillary hemangiomas constitute less than 2% of esophageal hemangiomas. This is the second case of histologically proven lobular capillary hemangioma of esophagus in Hyderabad region of India.

Case report
A 30 year old male patient was referred from a private hospital to the outpatient department of Gastroenterology of our hospital which is a tertiary referral centre in the state. He presented with a history of dyspepsia, dysphagia for both solids and liquids for past 6 months. Medical treatment given during this period produced no appreciable improvement of the symptoms. Patient did not have any loss of appetite or odynophagia but loss of 8-10 kg weight was present along with occasional episodes of melena. Past history and family history was not significant. Patient had no addictions. Endoscopic examination done for evaluation revealed elevated nodular hyperemic circumferential mucosal lesion in the lower esophagus 35 cm from incisor teeth. A provisional diagnosis of Barrett’s esophagus was made. Biopsy was taken which resulted in bleeding for which hemostasis was attained.

We received a single grey tan mucosal bit measuring 0.6X0.5 cm. The tissue was processed and paraffin embedded block was subjected to hematoxylin and eosin staining. Sections revealed non-
keratinizing stratified squamous epithelium with the sub-epithelial lamina propria being replaced by an non-capsulated tumor tissue arranged in lobular architecture, composed of numerous proliferated thin walled capillaries separated by scant to moderate amount of fibrous stroma with focal hyalinization and mononuclear infiltrate interspersed with few cavernous spaces. There was no evidence of any atypical mitoses or necrosis (Fig 1). A histopathological diagnosis of lobular capillary hemangioma was made. Subsequent immunohistochemistry with CD34 confirmed the diagnosis (Fig 2, Table 1).

**Discussion**

Esophageal hemangioma was first reported in 1956. Patterson et al reported a single case of esophageal cavernous hemangioma. In a 10 year study at New York Medical College, 3 cases of cavernous hemangioma of esophagus were documented out of 19982 autopsies performed. Review of 106 cases of vascular intestinal tumors at Mayo clinic, revealed 2 cases of esophageal hemangiomas. These tumors are more common in Japan where 67 cases have been reported. Okumara et al reported the first case of lobular capillary hemangioma of esophagus and published in 1983.

Lobular capillary hemangioma (LCH) is a common lesion seen in the skin, conjunctiva, mucosal surfaces of nasal cavity, oral cavity, tongue and gastrointestinal tract with common locations being duodenum and colon, but a rarity in esophagus.

Craig et al reported an isolated case of pyogenic granuloma of esophagus in Barrett’s mimicking as carcinoma. In our case Barrett’s was ruled out by histopathology.

A study of 30 case reports of esophageal hemangiomas revealed their location in upper esophagus, while in our case lesion was found in lower esophagus. Patients with esophageal hemangiomas present in a wide age group ranging between newborn and 72 years of age, more commonly in 4th decade and a male peak in 6th decade of life. Our patient belonged to younger age of 30 years.

Pathogenesis of lobular capillary hemangioma is not well understood. Trauma and an infectious etiology have been attributed by some investigators. Osler-Weber-Rendu syndrome is a hereditary disorder which can result in formation of multiple esophageal hemangiomas. Blue rubber bleb syndrome is another hereditary disorder in which esophageal hemangiomas are known to occur. No such similar family history has been noted in our patient.

Common clinical manifestations and dysphagia (45.2%), hematemesis (25.8%), malena (12.9%) and retrosternal burn (12.9%). It usually mimics malignancy. If left undiagnosed, vascular tumors may develop fatal complications like massive hematemesis spontaneously or following a biopsy. Biopsy in such cases is recommended to rule out coexistent malignancy. However, Araki et al has suggested that biopsy can be taken without serious consequences. Hence timely diagnosis and

![Fig 1. Hematoxylin and eosin staining (40X)](image1)

![Fig 2. Immunohistochemistry with CD34 (10X)](image2)

**Table 1:** Tabular representation of IHC expression in LCH and other hemangiomas-comparision between literature and our case

<table>
<thead>
<tr>
<th>IHC markers</th>
<th>Literature</th>
<th>Our case</th>
</tr>
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<tbody>
<tr>
<td></td>
<td>LCH</td>
<td>Other types</td>
</tr>
<tr>
<td>VEGF</td>
<td>+++</td>
<td>+</td>
</tr>
<tr>
<td>CD34</td>
<td>+++</td>
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</tr>
<tr>
<td>Ki67</td>
<td>++</td>
<td>+</td>
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intervention are mandatory, especially if they coexist with carcinoma.

Other modes of diagnosis include CT scan with contrast, which reveals an intramural mass with marked enhancement. However, this requires substantial expertise for its diagnosis.

The modalities of treatment include endoscopic resection, argon plasma coagulation and surgical resection. Endoscopic resection is generally preferred when the lesion is superficial, pedunculated and less than 2.5 cm in size. The new mode of treatment is fulguration with potassium titanyl phosphate/yttrium aluminum garnet laser. Our patient underwent argon plasma coagulation. The post operative period was uneventful.

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Conflict of interest: None

References


