

Pyogenic granuloma of the esophagus

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RESUMEN

Se comunica el caso de un hombre de 41 años que consultó por dolor retroesternal y fue sometido a examen endoscópico. El procedimiento de la endoscopia reveló una pequeña masa polipoide en la mucosa del esófago inferior, que fue resecada parcialmente. El examen histológico mostró que estaba compuesta por numerosos capilares en un estroma con infiltrados inflamatorios crónicos. En la superficie había una notable atipia regenerativa del epitelio, lo que inicialmente llevó al diagnóstico diferencial con una neoplasia maligna. Una nueva endoscopia a los dos meses mostró persistencia de una pequeña protrusión que en el estudio histológico reveló tejido conectivo laxo con capilares ramificados. La revisión de la bibliografía reveló otros seis casos de esta peculiar lesión, en dos combinada con esófago de Barret. El granuloma piógeno esofágico es inusual. La atipia regenerativa debe ser evaluada mediante una cuidadosa correlación clínico-patológica. No hay relatos previos de pacientes en los que pudo reconocerse la maduración histológica de la lesión como la observada en este caso.

Palabras clave: esófago, granuloma piógeno.

ABSTRACT

This paper reports the case of a 41 year-old man presenting with retrosternal pain and submitted to endoscopic examination. The endoscopic procedure revealed a small polypoid mass in the lower esophageal mucosa which was partially resected. Histologic examination showed that it was composed by numerous capillaries embedded in a stroma with chronic inflammatory cells. At the surface there was regenerative atypia which initially led to differential diagnosis with a malignant neoplasm. Follow-up at two months proved the presence of a remaining small protrusion which showed loose connective tissue with branching capillaries. Review of the literature revealed 6 other cases of this peculiar lesion, two combining Barrett's esophagus. Pyogenic granuloma of the esophagus is unusual. Careful clinico-pathologic correlation must be followed when interpreting regenerative atypia. There are no reported cases depicting the histologic maturation changes as seen in the present patient.

Key words: esophagus, pyogenic granuloma.

P yogenic granuloma is a lobular capillary hemangioma which frequently develops in the skin but which occasionally may also be found in mucosal surfaces including those of the digestive tract.

This report refers an example presenting in the esophageal mucosa.

CASE REPORT

This 41 year-old man was referred from the Cardiology Unit to the Gastroenterology Department due to retros-

ternal pain found to be of non-cardiogenic origin. The videoendoscopic study showed a small polypoid 1 cm in height mass nears the cardias (Figure 1). Partial endoscopic resection revealed an exophytic mass containing a proliferation of capillaries of different sizes with plump endothelial cells arranged in a stroma with chronic inflammatory infiltrates, and associated with erosion of the surface epithelium. The later area contained cells exhibiting regenerative atypia (Figures 2 to 4). Two months later the patient was submitted again to endoscopic exam which revealed persistence of a small protrusion in the same place of the previous lesion. The biopsy showed a small exophytic lesion composed by superficial hyperplastic squamous epithelium which was covering a mass of loose connective tissue with a few small vessels arranged in a branching pattern at the centre (Figure 5).

The lesion was then interpreted as a pyogenic granuloma well-developed in the first sample, the second one representing a sequel stage of it.

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Este artículo debe citarse como: Drut R. Pyogenic granuloma of the esophagus. *Patología Rev Latinoam* 2011;49(Supl. 1):S11-S13.



Figure 1. Endoscopic features of the lesion. The folds present in the left half of the figure belong to the gastric mucosa.

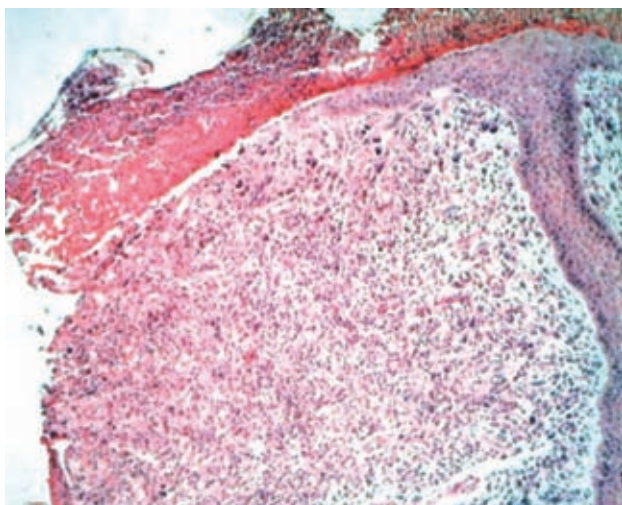


Figure 2. Low power view of the upper part of the lesion. There is partial erosion of epithelium which is replaced by fibrinous exudate forming a pseudomembrane. Below there is connective tissue with abundant capillaries and chronic inflammatory infiltrates.

DISCUSSION

Pyogenic granuloma presenting at the esophagus is a rare lesion.¹⁻⁶ Since the original report in a Japanese patient¹ there are but a few references in the literature (Table 1).

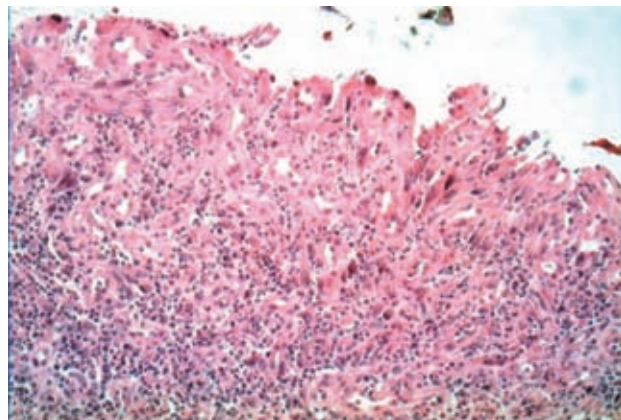


Figure 3. Higher power of the surface eroded area of Figure 2. There is abundant granulation tissue with capillaries up to the surface and epithelial cells with brisk regenerative atypia represented by nuclei exhibiting hyperchromasia and moderate pleomorphism.

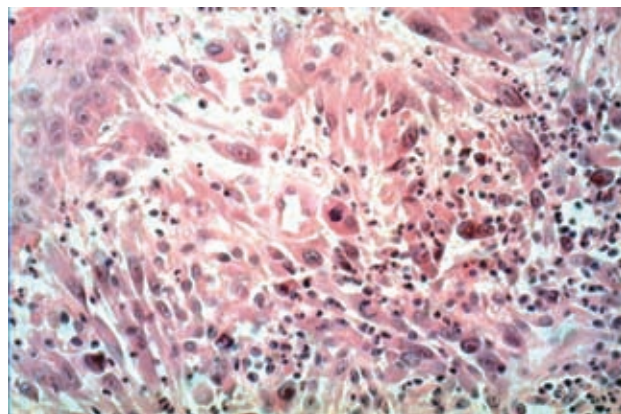


Figure 4. Interphase between normal epithelium and eroded zone depicting intense regenerative activity of the epithelial cells, some of which appear intermingled with the capillaries of the pyogenic granuloma.

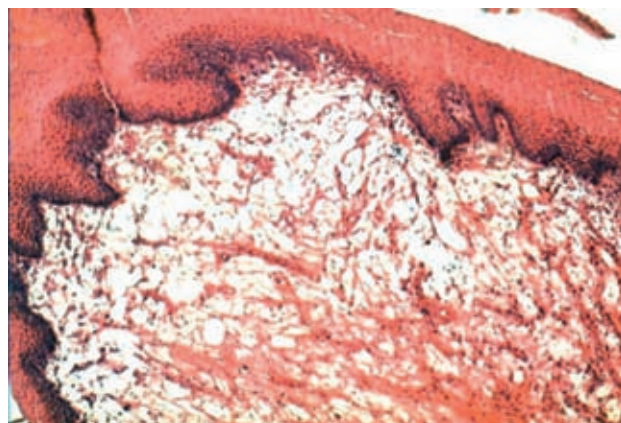


Figure 5. Histology of the residual lesion presenting hyperplastic epithelium covering loose connective tissue containing branching small vessels.

Table 1. Pyogenic granuloma of the esophagus. Reported cases*

<i>Author</i>	<i>Age/sex</i>	<i>Clinical findings</i>	<i>Site</i>	<i>Treatment</i>
Okumura T, et al ¹	49/F	Dysphagia	Lower	Surgical resection
Craig RM, et al ²	31/M	Severe reflux esophagitis	Lower, Barrett's esophagus	Endoscopic resection
Okada N, et al ⁴	56/M	Chest discomfort, months	Middle	Endoscopic resection
Van Eeden S, et al ⁵	55/F	Hematemesis; dysphagia	Lower	Endoscopic resection
Hoekstra, et al. ⁶	15/M	Dysphagia; 8 kg weight loss; severe vomiting as an infant	Lower Barrett's esophagus	Endoscopic resection

* The case reported by Manabe T et al.³ could not be obtained but just the title of the article.
Site: lower and middle refers to the esophagus.

Its clinical features as well as the endoscopic pattern may induce to the differential diagnosis with esophageal carcinoma.² That is why it is so important as to include its appropriate recognition within the spectrum of the esophageal pathology.

One of the reported patients presented with digestive tract hemorrhage⁵ and two other associated to gastroesophageal reflux and Barrett's esophagus.^{2,6} So, pyogenic granuloma in the esophagus may represent an isolated lesion or be related to another local condition.

In the present patient particularly, the surface regenerative atypia initially suggested the diagnosis of a pseudosarcomatous carcinoma, a condition combining a surface squamous cell carcinoma and an exophytic mass with elongated epithelial cells mimicking a sarcoma. However, the rest of the histologic details as well as the endoscopic features showing a small and localized exophytic mass contributed to dismiss that possibility. This example emphasizes the need to follow a careful correlation between the endoscopic and histologic findings in order to adequately interpret the lesion. Interestingly, there is no report presenting the late histologic features of pyogenic

granuloma of the esophagus as shown in Figure 5, which most probably resulted from incomplete resection during the first intervention.

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