

Esophageal Papilloma: Case Report and Review

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Abstract**Case Report**

Esophageal papilloma is a rare epithelial tumor of the esophagus [1], first described in 1959 by Adler *et al.*, [2]. Its prevalence varies between 0.01% and 0.45% in endoscopic series. It is usually located in the distal oesophagus and corresponds to a single small, whitish, sessile lesion. Multiple forms, true papillomatoses, and giant forms, up to 5 cm, have been described in the literature. The endoscopic appearance is characteristic, but not pathognomonic. Diagnosis is histological, based on three main features: hyperacanthosis, hyperkeratosis and papillomatosis. Little is known about its pathophysiology. Chronic irritation of the oesophageal mucosa due to chemical or mechanical factors, and HPV infection have been suggested [3]. Esophageal papilloma is considered a benign tumor. However, recent data highlight its malignant potential. In most cases, squamous cell carcinoma has developed over a giant papilloma or papillomatosis. The risk of cancer in these patients remains unknown. No consensus on endoscopic management and surveillance is available to date. We report the case of a patient presenting with epigastralgia and an esophageal papilloma discovered incidentally on esogastroduodenal fibroscopy (EGDF).

Keywords: Esophageal papilloma, Esophageal papillomatosis, Endoscopy, Squamous cell carcinoma, HPV infection**Copyright © 2025 The Author(s):** This is an open-access article distributed under the terms of the Creative Commons Attribution 4.0 International License (CC BY-NC 4.0) which permits unrestricted use, distribution, and reproduction in any medium for non-commercial use provided the original author and source are credited.

INTRODUCTION

Esophageal papillomatosis is a rare condition, often discovered incidentally during gastroscopy, in mostly asymptomatic patients, with a limited number of cases reported in the literature. The etiology of esophageal papillomatosis is not fully understood, but there are two hypotheses, one concerning inflammatory reactions such as gastro-esophageal reflux and another involving association with viral HPV infection [6]. In this article, we report the case of a patient with an esophageal papilloma discovered incidentally on EGDF.

OBSERVATION

Mdme K.A aged 30 years, without any particular antecedent. She presented with chronic

intermittent localized epigastralgia without radiation, evolving in a context of weight loss.

Clinical examination revealed mucocutaneous warmth, with the rest of the examination being unremarkable.

Biological workup showed iron-deficiency microcytic hypochromic anemia, with Hb 10g/dl and ferritin 4 g/dl.

The patient had undergone FOGD to investigate her chronic epigastralgia, which revealed: Los Angeles grade a esophagitis, a whitish sessile lesion in the upper third of the esophagus measuring approximately 5 mm, suggestive of a papilloma resected with biopsy forceps, and erythematous antral gastritis. Normal duodenal mucosa with preserved folds.



Figure 1: Endoscopic image of esophageal papilloma (normal staining)



Figure 2: Endoscopic image of esophageal papilloma (NBI staining)

Pathological examination revealed a polypoid formation bordered by a regular squamous epithelium with no identifiable conjunctivo-vascular axis, consistent with an esophageal papilloma. Mild, non-atrophic, slightly active antro-funditis and absence of *Hp* were noted.

An etiological work-up for anemia was started with iron supplementation.

The 3-month follow-up FOGD showed a normal-looking esophagus.

DISCUSSION

Esophageal involvement of human papilloma virus (HPV) is uncommon, symptomatologically aspecific or even asymptomatic, and therefore of incidental discovery.

It manifests itself in a variety of lesions, including ulcerations, hyperkeratoses and papillomas.

These papillomas can sometimes be very numerous, in which case the condition is described as papillomatosis.

Firstly, there is some uncertainty as to the existence of a specific link between HPV and esophageal papilloma. Esophageal squamous cell papilloma is a benign, asymptomatic lesion, discovered by chance, the pathogenesis of which is still uncertain, but is considered to be an inflammatory lesion associated with mucosal aggression (pyrosis, chemical irritants, etc.).

However, some studies have described the presence of HPV in papillomas, which could then be a pre-cancerous lesion [5]. HPV may also be a risk factor for esophageal squamous cell carcinoma.

In fact, a meta-analysis reports increasing evidence that HPV infection exposes the patient to the risk of squamous cell carcinoma, with an odds ratio of 3.32, rising to 3.52 for the HPV-16 subtype (although the heterogeneity of the series and the need for further studies are highlighted) [4].

At present, prevalences are considered to be highly variable throughout the world, and there are no conclusive studies on treatment modalities and/or surveillance after resection of these papillomas.

However, given the potential risk of malignant transformation, it is preferable to treat these lesions with the various endoscopic modalities available before proceeding with invasive surgical management [7].

Therefore, if endoscopy reveals extensive esophageal lesions of varying sizes, a fortiori pale or whitish in color, wart-like with exophytic projections, the diagnosis of diffuse esophageal papillomatosis should be raised. In electron chromoendoscopy, as by NBI, brownish line-shaped vessels are often visible [8].

CONCLUSION

Esophageal papillomas are usually asymptomatic and detected incidentally during endoscopy. Although their incidence has increased in recent years, the pathogenesis and malignant potential of esophageal papillomas are not fully understood and conflicting information exists.

REFERENCES

1. Mosca S, Manes G, Monaco R, Bellomo PF, Bottino V, Balzano A. Squamous papilloma of the esophagus: long-term follow up. *J Gastroenterol Hepatol* 2001;16:857–61.
2. Adler RH, Carberry DM, Ross CA. Papilloma of the esophagus. Association with hiatus hernia. *J Thorac Surg* 1959;37:625–35.
3. Odze R, Antonioli D, Shocket D, Noble-Topham S, Goldman H, Upton M. Esophageal squamous papillomas. A clinicopathologic study of 38 lesions and analysis for human papillomavirus by the polymerase chain reaction. *Am J Surg Pathol* 1993;17:803–12.
4. X Li, C Gao, Y Yang, et al. Systematic review with meta-analysis: the association between human papillomavirus infection and oesophageal cancer. *Aliment Pharmacol Ther* 2014; 39: 270-81.
5. MC d’Huart, JB Chevaux, A Marchal Bressenot, et al. Prevalence of esophageal squamous papilloma (ESP) and associated cancer in northeastern France. *Endosc Int Open*. 2015;3(2):E101-6.
6. Pantham G, Ganesan S, Einstadter D, Jin G, Weinberg A, Fass R. Assessment of the incidence of squamous cell papilloma of the esophagus and the presence of high-risk human papilloma virus. *Dis Esophagus* 2017; 30(1): 1-5.
7. Bronswijk M, Christiaens P, Moons V. Diffuse esophageal papillomatosis complicated by squamous cell carcinoma. *Dig Liver Dis* 2019; 51(8): 1197.
8. Wong MW, Bair MJ, Shih SC, Chu CH, Wang HY, Wang TE, Chang GW, Chen MJ. Using typical endoscopic features to diagnose esophageal squamous papilloma. *World J Gastroenterol* 2016; 22(7): 2349-56.