

Case Report

Squamous Cell Papilloma of the Stomach

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ABSTRACT

Benign tumors in the stomach are rare in comparison with malignant tumors. Squamous cell papilloma (SCP) of the stomach is a relatively rare benign tumor and only few case

reports are found in the literature. Herein, we report a case of squamous cell papilloma of the gastric cardia and also a review the relevant literature.

KEY WORDS: adenocarcinoma, gastric cardia, gastrectomy, ulcerative mass

INTRODUCTION

The incidence of gastric tumors varies, depending on geographical location and ethnic background^[1]. Generally speaking, gastric adenocarcinoma is relatively common and comprises over 90% of all gastric tumors in the world, especially in many Asian countries. This suggests that the environmental and dietary factors are probably responsible^[1]. On the contrary, the occurrence of benign tumor (1.3 to 2.0 percent) in the stomach is rare in comparison with gastric cancer^[2-3]. Even more, in some articles, squamous cell papilloma (SCP) was usually noted in gastrointestinal system except the stomach and hard to distinguish from malignant tumor of the stomach^[4-6]. Morphologically, the development of benign tumors is characterized by a two stage model, including early lesions such as epithelial damage, hyperplasia and hyperkeratosis, and later stage such as diffuse hyperplasia, dysplasia, papilloma and squamous-cell carcinoma^[7]. On reviewing previous literature, very rare case reports about squamous cell papilloma (SCP) of the stomach were found^[6,8-11]. SCP of the stomach is a comparatively rare lesion and there is scant literature on this subject. It was even noted on necropsy findings^[6,8]. Because of the reasons mentioned above and the fact that a benign tumor may take on malignant characteristics^[7-8], we report a case of primary SCP of the gastric cardia.

CASE REPORT

A 29-year-old fireman presented with progressive

swallowing difficulty and pain in the epigastric area for three months. The symptoms were exacerbated by eating solid food. A body weight loss of 5 kg was also noted. Physical examination showed only mild tenderness in the epigastric area. Esophago-gastro-duodenoscopy revealed an erosive and ulcerative mass in the gastric cardia (Fig. 1). Chest and abdominal computed tomography (CT) showed a heterogeneous density mass at the gastric cardia (Fig. 2). Total gastrectomy was performed because of a high suspicion of malignancy. On gross examination, there was an ill-defined polypoid lesion, measuring 5.5 x 4.4 x 2.1 cm in the gastric cardiac region. Microscopically, papillary squamous epithelium with parakeratosis and hyperkeratosis was noted (Fig. 3).

DISCUSSION

Customarily, benign gastric tumors were classified according to their histogenetic origin. Adenoma and leiomyoma preponderantly comprise more than 90% of all benign tumors of the stomach^[12]. However, SCP of the stomach was scarcely seen in published articles^[4,10,12]. Only rare case reports about SCP of the stomach were found^[2,6,8-9,11].

SCP of the stomach may be located at antrum, pylorus and greater or lesser curvature^[2,8-9]. To date, only one article regarding SCP at the gastric cardia was found^[13].

Ectopic squamous epithelium appears to be extremely rare in the stomach^[14], but squamous metaplasia has been described in some articles^[15-16].

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Fig. 1: Esophago-gastro-duodenoscopy revealed a mass in the gastric cardia

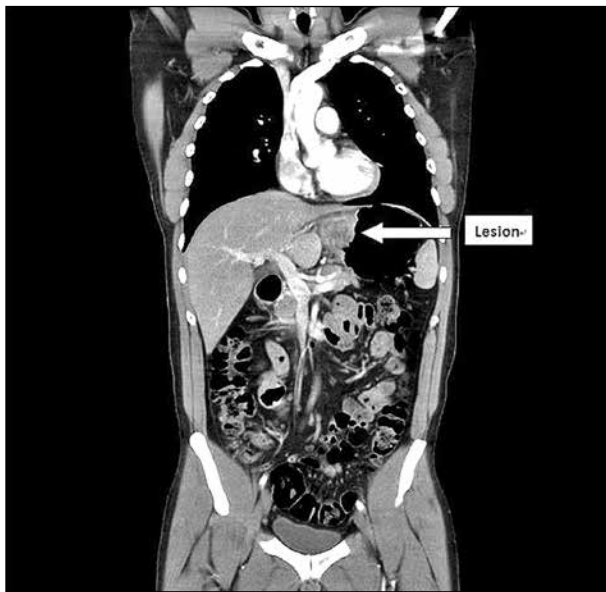


Fig. 2: Chest and abdominal computed tomography showed a mass with heterogeneous density at the gastric cardia

Though the real pathogenesis of SCP of the stomach remains unknown, two theories including squamous metaplasia of the gastric mucosa before malignant transformation and squamous differentiation in a pre-existing adenocarcinoma were proposed^[17].

CONCLUSION

SCP of the gastric cardia is quite rare. This particular case report emphasizes consideration of this condition as a differential diagnosis in gastric tumors.

REFERENCES

1. Robbins SL, Kumar V, Cotran RS, *et al.* Pathologic basis of disease. Robbins and Cotran, editors. Saunders / Elsevier, 2010.
2. Douglas J. Benign tumors of the stomach. *Ann Surg* 1923; 77:580.

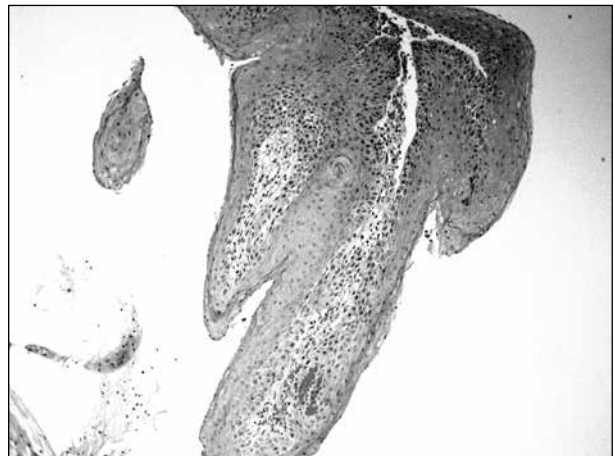


Fig. 3: Microscopic examination showing papillary squamous epithelium with parakeratosis and hyperkeratosis

3. Marshall S. Gastric polyposis. *Surg Clin North Am* 1952;857.
4. Amegbor K, Napo-Koura G, Songne-Gnamkoulamba B, *et al.* Epidemiological and pathological aspects of gastrointestinal tumors in Togo. *Gastroenterol Clin Bio* 2008; 32:430-434.
5. Mosca S, Manes G, Monaco R, *et al.* Squamous papilloma of the esophagus: Long-term follow up. *J Gastroenterol Hepatol* 2001; 16:857-861.
6. Parks RE. Squamous neoplasms of the stomach. *Am J Roentgenology* 1967; 101:447.
7. Kroes R, Wester P. Forestomach carcinogens: possible mechanisms of action. *Food Chem Toxicol* 1986; 24:1083-1089.
8. Ingber IS. Papillomatous growths of the stomach. *Radiology* 1923; 1:50.
9. Harper R. A case of pedunculated papilloma of the stomach. *Br J Radiol* 1932; 5:811.
10. Walk L. Villous tumor of the stomach: clinical review and report of two cases. *Arch Intern Med* 1951; 87:560.
11. Carr G, Squires G. Squamous papillomatosis of the stomach, a new pathologic entity: report of a case. *The Am Surg* 1962; 28:790.
12. Grafe W, Thorbjarnarson B, Pearce JM, *et al.* Benign neoplasms of the stomach. *Am J Surg* 1960; 100:561-571.
13. Balfour DC, Henderson EF. Benign tumors of the stomach. *Ann Surg* 1927; 85:354.
14. Mori M, Iwashita A, Enjoji M. Adenosquamous carcinoma of the stomach. A clinicopathologic analysis of 28 cases. *Cancer* 1986; 57:333-339.
15. Ruck P, Wehrmann M, Campbell M, *et al.* Squamous cell carcinoma of the gastric stump: A case report and review of the literature. *Am J Surg Pathol* 1989; 13:317.
16. Takita J, Kato H, Miyazaki T, *et al.* Primary squamous cell carcinoma of the stomach: a case report with immunohistochemical and molecular biologic studies. *Hepatogastroenterology* 2005; 52:969-974.
17. Schmidt C, Schmid A, Luttges J, *et al.* Primary squamous cell carcinoma of the stomach. Report of a case and review of literature. *Hepatogastroenterology* 2001; 48:1033-1036.