Verrucous carcinoma of the esophagus: a complex diagnosis

We present the case of a 71-year-old woman with complicated gastroesophageal reflux disease with a peptic stricture located 30 cm from the incisors. There was no history of caustic ingestion or alcohol, or use of tobacco. Following four attempts at endoscopic dilation, a self-expanding, removable plastic stent had been placed previously. After 4 months of the placement of the stent, the patient experienced progressive dysphagia, retrosternal pain, and hematemesis. Esophagogastro-duodenoscopy (EGD) showed clots in the esophageal lumen. After stent removal, an exophytic mass causing partial stenosis was identified in the mid-esophagus (Fig. 1). Histological evaluation revealed only inflammatory changes. Endoscopic ultrasound showed invasion through the muscularis propria, with a nonspecific paraesophageal lymph node. Fine-needle aspiration cytology was also negative for malignancy. Thoracoabdominal computed tomography (CT) showed no distant lesions.

The patient underwent Ivor–Lewis esophagogastrectomy. The resected specimen consisted of a multilobulated mass (Fig. 2) with an ulcerated surface and signs of severe chronic inflammation. Histologically, the lesion showed papillary projections of well-differentiated keratinized squamous epithelium with mild cytologic atypia. Voluminous rete pegs extended into the muscularis propria (Fig. 3). Isolated lymph nodes were negative for carcinoma. Histological diagnosis was verrucous squamous cell carcinoma (VSC), pT2 N0 M0.

VSC of the esophagus is a rare variant of squamous cell carcinoma, with just over 20 cases reported since its first description [1]. It occurs in middle-aged patients with a male–female ratio of about 2 : 1, and mostly affects the lower esophagus. Complications are usually due to local invasion [2]. Lymph node or distant metastasis is exceptional. Most cases of VSC have associated chronic esophageal injury [3]. The human papillomavirus has been recently implicated [4] but was negative in our case. Dysphagia/odynophagia, weight loss, hematemesis, and coughing are the main symptoms. Histologically, acanthosis, hyperkeratosis, and parakeratosis are usually observed. Inflammatory

Fig. 1 a Endoscopic view of the esophagus showing a whitish, exophytic, wartlike tumor causing partial stenosis. b Barium radiography: intraluminal esophageal tumor causing mild dilatation of the proximal esophagus. c Endosonography view: a predominantly hypoechoic, poorly defined wall thickening in the middle third of the esophagus.

Fig. 2 a Resected specimen with the esophageal tumor in the middle third of the esophagus. b Closeup view of the whitish, multilobulated, pseudo-pedunculated tumor, 3.9 × 2.5 cm in size.

Fig. 3 Histological appearance. a Full view of the lobulated pseudopolypoid lesion partially covered by inflammatory granulation tissue. b Invasion of the underlying stroma in a pushing fashion by the well-differentiated squamous neoplastic epithelium (hematoxylin-eosin stain; magnification × 50).
infiltrates around the areas of tumor are also commonly described. Because these findings are nonspecific, endoscopic mucosal biopsies rarely help confirm the diagnosis. Surgery is the only curative treatment once the tumor has extended into the submucosa [5].

Competing interests: None

References

1 Ackerman LV. Verrucous carcinoma of the oral cavity. Surgery 1948; 23: 670 – 678