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NOTAS CLÍNICAS

Primary squamous cell carcinoma of the stomach presenting as a huge retroperitoneal tumor: a case report

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ABSTRACT

A man complained of upper abdominal pain and early satiety for one month. An upper gastrointestinal endoscopy showed nothing special. A CT scan of the abdomen was performed, which demonstrated a huge heterogeneous retroperitoneal mass close to the dorsal wall of the stomach and surrounding the abdominal aortic and celiac trunk. The resected specimen suggested that an irregular tumor invaded the dorsal wall of the stomach. Postoperative histological examination confirmed that it was a gastric squamous cell carcinoma.

Key words: Primary squamous cell carcinoma. Retroperitoneal tumor. Intracellular bridges.

INTRODUCTION

Primary squamous cell carcinoma (SCC) of the stomach is an extremely rare malignancy, with a worldwide incidence of 0.04% to 0.07% of all gastric cancers (1). The pathogenesis of this tumor remains obscure, and the optimal treatment strategy is controversial. Although, the incidence of gastric cancer is much higher than the past 20 years in china, primary gastric SCC is still rare. Here, we describe a case of gastric SCC which presents as a huge retroperitoneal tumor.

CASE REPORT

A 59-year-old man was admitted with 1-month history of upper abdominal pain and early satiety. He received an upper gastrointestinal endoscopy, which was normal. Then, abdominal computed tomography (CT) was performed, which revealed a huge heterogeneous retroperitoneal mass adjacent to the anterior wall of the abdominal aorta and surrounding the celiac trunk (Fig. 1). The patient was diagnosed presumptively with retroperitoneal tumor, with no evidence of metastatic disease.

The results of physical examination were unremarkable. Routine laboratory tests revealed leukocytosis (11,900 cells/mm^3). The tumor marker levels were as follows: SCC antigen, 1.5 ng/ml (normal range, 0~0.5 ng/ml) and CYFRA 21-1, 0.8 ng/ml (normal range, 0~1.5 ng/ml).

Intraoperatively, a huge heterogeneous mass (about 6.0×5.0×6.0 cm) adjacent to the anterior wall of the

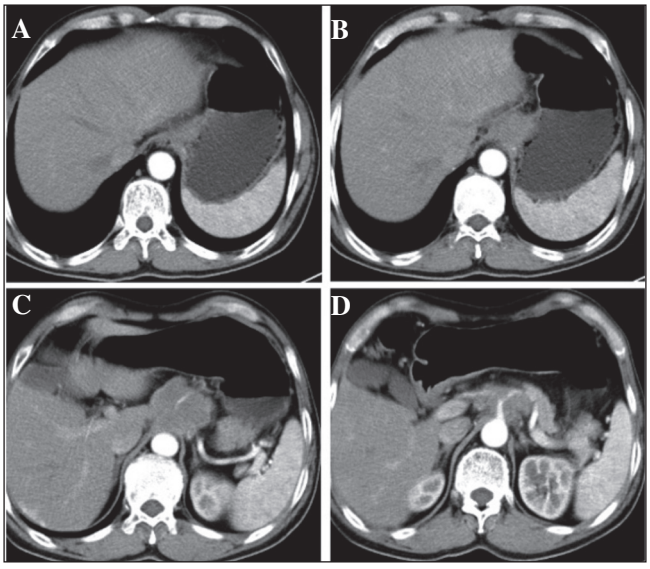

Fig. 1. Computed tomography revealing a heterogeneously enhanced lesion between the abdominal aorta and the stomach.

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abdominal aorta was detected, surrounding the celiac trunk and invasive to the dorsal wall of the stomach.

Retroperitoneal mass resection, proximal partial gastrectomy and esophagogastric anastomosis was performed. There was no evidence of distant metastasis. On opening the stomach, no lesions were observed along the gastric mucosal. Pathological examination of sections of the resected specimen revealed a poorly-differentiated SCC with mosaic patterns of cell arrangement and intracellular bridges (Fig. 2). No nodal metastasis was apparent. The tumor had not invaded the mucosa of the esophagogastric junction. The clinical stage was stage IIB (T4N0M0), according to the TNM classification, version 7. Therefore, primary SCC of the stomach was diagnosed. The patient received systemic chemotherapy with 5-fluorouracil plus oxaliplatin. However, 10-months after the operation, a CT scan revealed metastatic tumors in the liver and spleen, accompanied by para-aortic lymph node metastasis. Although the patient immediately received systemic chemotherapy with docetaxel plus cisplatin, the disease progressed. The patient died 16 months after the operation.

DISCUSSION

The diagnostic criteria defined by Parks (2) for primary SCC of the stomach are: a) tumor must not be occurring in the cardia; b) the tumor must not extend into the esophagus; and c) there must be no evidence of SCC in any other organ. In our case, the tumor was present at the body of the stomach with no evidence of extending into the esophagus or arising from any other organ.

Various hypotheses, such as totipotent stem cells, squamous metaplasia, foci of heterotopic squamous epithelium and the overgrowth of a squamous epithelium element in a primary adenocarcinoma, have been proposed regarding the origin of SCC of the stomach (3,4). However, the pathogenesis of gastric SCC remains obscure. Gastric SCC is an aggressive neoplasm which favors to metastasize to the lymph nodes and the liver. As shown in our case, the gastric SCC is an extraluminal gastric tumor. We favor the theory that SCC originates from the foci of heterotopic squamous epithelium of the stomach submucosa or other layers. Then it developed to an extraluminal gastric tumor and invaded to the celiac trunk.

Some studies reported that primary gastric SCC has a better prognosis than gastric adenocarcinoma (5,6). However, gastric SCC generally had a poor outcomes because of that is usually diagnosed at an advanced stage and aggressively metastasizes to the lymph nodes and the liver (1,7,8). Chemotherapy combined with surgical resection is reported to improve the prognosis (9). It is worth noting that no standard chemotherapy or chemotherapeutic regimen has been defined for SCC of the stomach till now. Our patient received definitive chemotherapy with 5-fluorouracil plus oxaliplatin and docetaxel plus cisplatin to manage the metastatic tumor in the liver and spleen. However, treatment failed to provide a good long-term outcome.

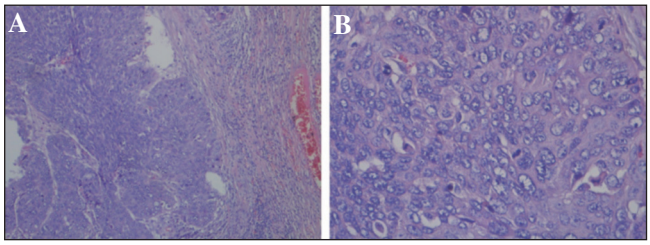

Fig. 2. Histopathological examination showing a poor-differentiated squamous cell carcinoma with mosaic patterns of cell arrangement (A) and intracellular bridges (B).

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