

## Gastric Squamous Cell Carcinoma: A Case Report

### Gastrik Skuamöz Hücreli Karsinom: Olgu Sunumu

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#### ABSTRACT

Gastric squamous cell carcinoma is rarely seen and affects mostly elder patients. A 78-year-old woman presented with nausea, vomiting, weight loss, and epigastric pain. There was an ulcero-vegetative mass in the posterior area from the large curvature to the antrum in the endoscopic examination. The gastroesophageal junction and cardia were also normal. We performed a diagnostic endoscopic biopsy. Histopathologically, it was composed of atypical squamous cells displaying infiltrating solid nests in a desmoplastic stroma. Immunohistochemically, the neoplastic cells also showed positivity for p40 and p63 and negativity for CEA. Besides, there was no radiological evidence of metastasis from other organs. We herein presented a case of gastric squamous cell carcinoma and discussed its clinical and morphological features with the literature.

**Keywords:** Stomach; squamous cell; carcinoma.

#### ÖZ

Gastrik skuamöz hücreli karsinom nadir görülür ve çoğunlukla yaşlı bireyleri etkiler. Yetmiş sekiz yaşında kadın hasta bulantı, kusma, kilo kaybı ve epigastrik ağrı şikayeti ile başvurmuştur. Endoskopik incelemede posterior bölgede büyük kurvaturdan antrum'a kadar ülsero-vegetatif bir kitle saptanmıştır. Özofagogastrik bileşke ve kardiya ayrıca normal olarak izlenmiştir. Hastaya tanı amaçlı endoskopik biyopsi yapılmıştır. Histopatolojik olarak, tümörün desmoplastik bir stromada infiltre yuvalar oluşturan atipik skuamöz hücrelerden meydana geldiği görülmüştür. İmmünohistokimyasal olarak neoplastik hücrelerde p40 ve p63 ile pozitiflik saptanmış olup CEA ile immünoekspresyon izlenmemiştir. Başka bir organ kaynaklı buraya metastazı düşündürecek radyolojik bulgu da saptanmamıştır. Burada bir gastrik skuamöz hücreli karsinom vakası sunulmuş olup klinik ve morfolojik özellikleri literatür eşliğinde tartışılmıştır.

**Anahtar kelimeler:** Mide; skuamöz hücre; karsinom.

#### INTRODUCTION

Malignant epithelial tumors of stomach are categorized as adenocarcinoma, squamous cell carcinoma, adenosquamous carcinoma, undifferentiated carcinoma, gastroblastoma, neuroendocrine tumor, neuroendocrine carcinoma, and mixed neuroendocrine/non-neuroendocrine carcinoma according to WHO 2019 classification (1). Gastric squamous cell carcinoma that is a rare cancer accounts for 0.04-0.07% of all gastric malignant epithelial tumors (2). It was described for the first time in 1895 by Röriç et al (3). We herein report a case of gastric squamous cell carcinoma and discussed its clinical and morphological features with regard to the literature.

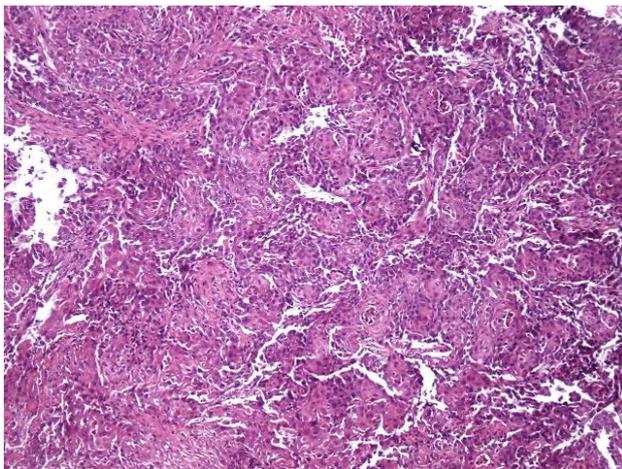
#### CASE REPORT

A 78-year-old woman presented with nausea, vomiting, weight loss, and epigastric pain. She had gone to a special hospital for treatment of weakness in 3 months ago.

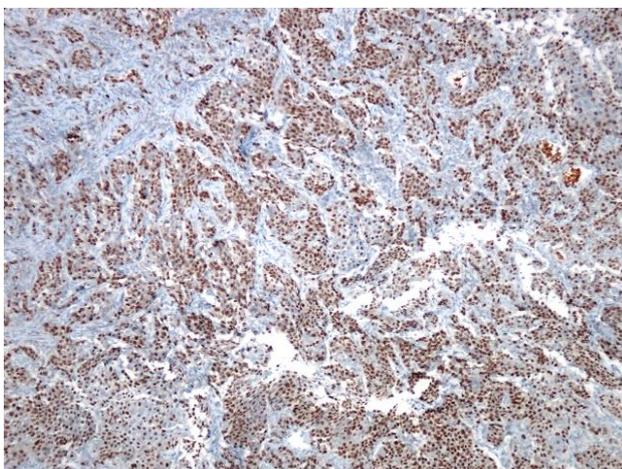
There was no family history. She was taking indapamide for hypertension. The patient's complete blood count was consistent with anemia (Hb: 6 g/dl). Other routine abnormal biochemical values were direct-bilirubin: 0.26 mg/dl, indirect-bilirubin: 1.54 mg/dl, urea: 44.47 mg/dl,



**Figure 1.** Endoscopic view of the tumor



**Figure 2.** The tumor was consisted of squamoid nests in a desmoplastic stroma. There was no any glandular component (H&E, x100).

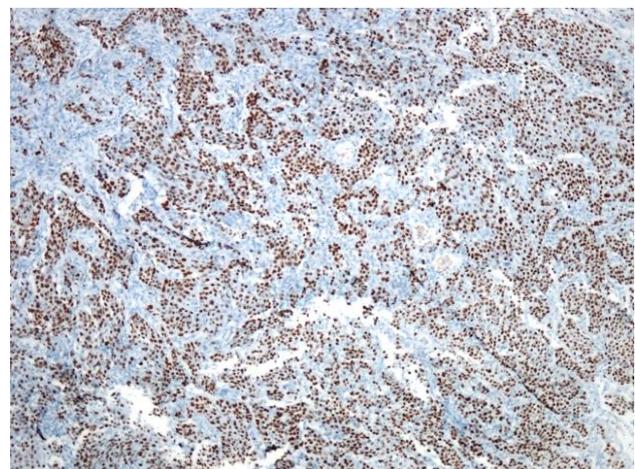


**Figure 3.** p63 immunopositivity in neoplastic cells (x100)

BUN: 21.18 mg/dl, albumin: 3.22 g/dl and LDH: 310 U/L. Ultrasonographically, there was thickening in the large curvature wall of the stomach and lymphadenopathy (16x11 mm) in adjacent adipose tissue. Contrast computed tomography of the stomach showed infiltrative wall thickening that was localized from the large curvature to the antrum, in addition to lymphadenopathies that were consistent with metastasis. Other organs and anatomical structures were within normal limits. In the endoscopic examination, there was a ulcero-vegetative mass in previously described localization (Figure 1). The gastroesophageal junction and cardia were also normal. We performed a diagnostic endoscopic biopsy. Histopathologically, it was composed of atypical squamous cells displaying infiltrating nests in a desmoplastic stroma. Histochemically, mucin production was absent. The neoplastic cells also immunohistochemically showed positivity for p40 and p63 and negativity for CEA (Figure 2-4). The lesion was diagnosed as squamous cell carcinoma. Three units of erythrocyte suspension were given for anemia. The patient was informed about his pathology and advised to undergo gastrectomy. Unfortunately, she went to another institution and we, therefore, lost to clinical follow-up.

## DISCUSSION

Gastric malignant tumors which constitute about 5.7% of all malignant tumors are the fifth common neoplasm after those of lung, breast, prostate, and thyroid in Turkey. Although gastric adenocarcinomas are common subtypes, gastric squamous cell carcinomas constitute less than 1%. It is most commonly seen in descending order in the upper, lower and middle gastric regions (1). It occurs predominantly in men (4). The clinical symptoms are similar to other carcinomas of the stomach (1). Diagnostic criteria that were first reported by Parks RE (5) as follows: (i) not originated from the cardia, (ii) not extend from the esophagus, and (iii) no evidence of metastatic squamous cell carcinoma from other organs or tissue. And then, the Japanese Gastric Cancer Association (6) stated that all tumor cells must be atypical squamous cells without any glandular differentiation and these cells must originate in the gastric mucosa.



**Figure 4.** p40 immunopositivity in neoplastic cells (x100)

Molecular data are not available due to the rarity of this tumor. The etiology is completely unknown; however, positive smoking history is related to some cases (4). Viral carcinogenesis is controversial and any proven data has not been available in the literature (4). Zhou et al. (7) reported a patient with concurrent *H. pylori* gastritis and primary gastric squamous cell carcinoma. We could not comment on the presence of *H. pylori* since all of our samples consisted of tumoral tissues. Some authors stated that pluripotent stem cells displaying squamous metaplasia or ectopic squamous nests can be related to carcinogenesis (4). Macroscopic features are similar to other gastric cancers. Microscopic features are also the same as those of other organs such as the esophagus. Sufficient sampling and exclusion of metastasis history are important for the correct diagnosis. Although gastrectomy could not be performed, endoscopic and radiological findings suggest that the tumor may be primarily of gastric origin in the present case. CEA negativity also revealed that there was no other component in the samples of our case.

This tumor commonly presents at an advanced stage that is related to a poor outcome. Distant metastases occur primarily in the liver (1). Due to the lower frequency of this tumor, specific prognostic factors have not been reported so far. However, gastric squamous cell carcinoma is more aggressive compared with the same stage of gastric adenocarcinomas (8-10). Similar to gastric adenocarcinoma, the main treatment is surgery involving gastrectomy and lymph node resection. Adjuvant chemotherapy consisting of 5-fluorouracil, platin and taxane-based regimens can be given (11).

As a result, gastric squamous cell carcinoma is rarely seen. Esophageal tumoral infiltration and metastasis originated from other organs or tissue should be considered in the differential diagnosis.

**Informed Consent:** Written informed consent was obtained from the case.

**Conflict of Interest:** All the authors declare that there is no conflict of interest.

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