Olgu Sunumu (Case Report)

Nadir Bir Vaka: Gastrik Schwannoma

A Rare Case Report : Gastric Schwannoma

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Özet

Gastrointestinal sistem schwannomaları, gastrointestinal duvarın sinir pleksusundaki Schwann hücrelerinden köken alır. Schwannomalar gastrointestinal sistemde en yaygın midede bulunur, ikinci sırada en yaygın kolon görülür. Gastrik schwannomalar klinik olarak epigastrik ağrı şikayetleri ile ortaya çıkmasının yanı sıra acil müdahale gerektiren kanama ve perforasyonla da kendini gösterebilir. 81 yaşında bayan hasta. Üst gastrointestinal kanal endoskopisinde, submukozal gastrik antrumda mide lümenine yaklaşık 4 cm çapında çıkıntı gösteren, iyi sınırlı yarı mobil kitle lezyonu tespit edildi. Hastaya gastrik schwannoma tanısı konuldu. Bu çalışmada kliniğimize epigastrik ağrı şikayeti ile başvuran ve nadir görülen gastrik schwannoma tanısı konan olgumuzu klinik ve patolojik verilerle sunmayı amaçladık.

Anahtar kelimeler: Mide,schwannoma,stromal tümörAbstract

Abstract

The gastrointestinal tract schwannomas originate in Schwann cells in the neural plexus of the gastrointestinal wall. In the gastrointestinal tract, schwannomas are the most common in the stomach, this is followed by the second most common occurrence in the large intestine . Gastric schwannomas may present complaints of epigastric pain clinically, as well as bleeding and perforation that requires an emergency intervention . An 81-year-old female patient had a well-defined semi-mobile mass lesion protruding about 4 cm in diameter from the gastrointestinal endoscopy and submucosal gastric antrum. The patient was diagnosed with gastric schwannoma. In this study, we aimed to present clinical and pathologic findings of our case diagnosed with gastric schwannoma with epigastric pain in our clinic.

Keywords: Gastric,schwannoma,stromal tumor

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INTRODUCTION

Schwannomas are often benign, slow-growing neoplasms originating from the Schwann cells, which form the neural sheath. The gastrointestinal (GI) tract schwannomas originate in Schwann cells in the neural plexus of the gastrointestinal wall. Schwannomas account for 2% to 7% of the gastrointestinal mesenchymal tumors. In the gastrointestinal tract, schwannomas are the most common in the stomach, this is followed by the second most common occurrence in the large intestine. Schwannomas constitute 0.2% of all gastric neoplasms, and 4% of all gastric benign neoplasms (1,2). Gastric schwannomas may present complaints of epigastric pain clinically, as well as bleeding and perforation that requires an emergency intervention. In this study, we present our case, who had admitted to our clinic with complaints of epigastric pain and diagnosed as schwannoma, with clinical and pathological data.

CASE

Consent form is taken from patient. An 81-year-old female patient presented to our general surgery clinic with a complaint of epigastric pain. The abdomen ultrasonography (USG) revealed a well-circumscribed hypoechoic solid mass lesion of 43x40 mm in size in the epigastric region. Gastrointestinal stromal tumor (GIST) was suspected radiologically. In the upper GI tract endoscopy, a well-circumscribed semi-mobile mass lesion was identified, showing approximately 4 cm in diameter protuberance into the gastric lumen, in the submucosal gastric antrum **(Fig. 1)**. The abdominal computed tomography screening revealed multiloculated hypodense mass of submucosal origin **(Fig. 2)**. After preoperative preparation, the patient underwent a gastric wedge resection under general anesthesia. The patient had no complaints during postoperative follow-up, and she was discharged on the 4th day. In the histopathologic examination of the specimen, a submucosal and intramural benign neoplastic lesion of 3.5 cm in diameter was identified. The immunohistochemical staining was strongly positive for S-100 and GFAP, focally positive for CD-34, and negative for pancytokeratin and actin. Ki-67 index was 2%-3%. With these results, the patient was diagnosed as gastric-schwannoma **(Fig.3)**.

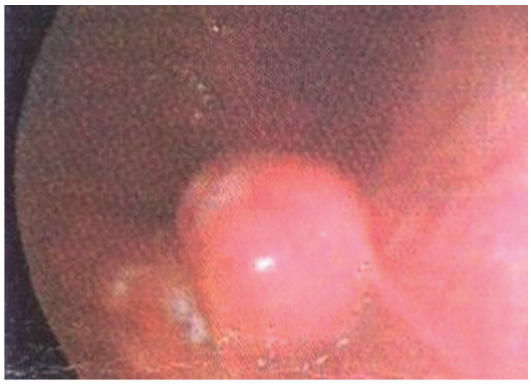

Fig 1. Endoscopic image-1-Smoothly confined mass appearance about 4 cm in diameter with submucosal placement in gastric antrum in upper GIS endoscopy

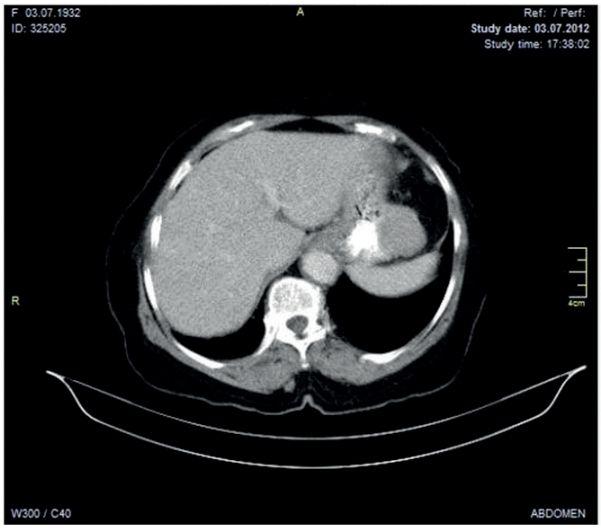

Fig 2. Computed tomography appearance of a submucosal derived multiloculated hypodense mass lesion

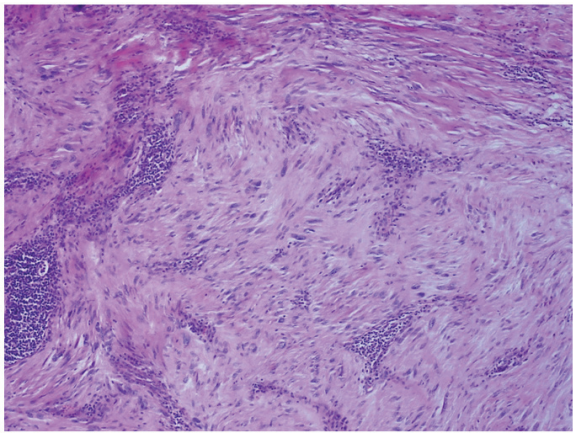

Fig.3 Microscopically the tumor was composed of spindl cells forming sheets in a storiform pattern.

DISCUSSION

GI tract schwannomas originate in Schwann cells in the neural plexus of the gastrointestinal wall. Schwannomas constitute 0.2% of all gastric neoplasms, and 4% of all gastric benign neoplasms (1,2). GI tract schwannomas have significant histological differences than the schwannomas located in soft tissues or central nervous system. GI tract schwannomas have positive reaction for S-100 protein and they have a microtrabecular structure. They consist of spindle cells of peripheral lymphoid clusters. They typically do not have the nuclear palisading structure seen in classic schwannomas (3,4). Gastric schwannomas are most common in the 3rd and 5th decades (2), anatomically they are often

located on the fundus of the stomach, and this is followed by corpus and antrum, respectively. GI tract schwannomas found in adult patients are benign tumors with an excellent prognosis after surgical resection. Although usually asymptomatic clinically, patients may present with symptoms such as epigastric pain, palpable mass, gastrointestinal bleeding due to ulceration, anemia and fatigue (3,4).

The asymptomatic cases of schwannoma may be found incidentally during laparotomy performed for other reasons. And, since schwannomas are located on submucosa and muscularis propria, the mucosa on the lesion is intact in general. Therefore, endoscopic mucosal biopsies are not suitable for diagnosis. A deep submucosal biopsy is required. In endosonography, schwannomas have lesser echogenicity than the than surrounding normal muscle tissue and a marginal halo is presented connected to lymphoid sheaths. Endosonography may also provide sufficient information about the layer, where the tumor is originated from. On the CT, schwannomas are usually observed as a spherical, oval or multilobulated contoured, hypodense solid mass, with variable staining pattern adjacent to the gastric wall. In the differential diagnosis of the mass lesions arising from the wall of the gastrointestinal tract, GISTs, which are mesenchymal neoplasms, should be considered first.

The malignancy potential of GISTs increase with extragastric localization and with sizes over 5 cm; whereas, gastric schwannomas have no malignant potential, other than the rarely observed pediatric cases (4,5).

As a conclusion, in the differential diagnosis of the homogeneous, well-circumscribed, submucosal mass lesions arising from the gastric wall, gastric-schwannoma, which have a benign potential, should be considered. In the schwannomas arising from the gastrointestinal tract, resection performed with a safe surgical margin is adequate for the treatment, and larger resections are not necessary.

Compliance with ethical standards

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