Giant gastric schwannoma presenting with upper gastrointestinal bleeding

Üst gastrointestinal kanama prezantasyonlu dev gastrik schannoma

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ÖZET: *25 cm büyüklüğünde dev bir malign gastrik Schwannoma'sı olan olgunun, ilk tanıyı üst gastrointistinal sistem kanaması ile başvurduğunda almıştır. Aynı zamanda karaciğer metaztazlar de tespit edilmiştir. Tümörle birlikte, midenin proksinali ve dalakta çıkartılmıştır. Karaciğerdeki lezyonlar için kemoterapi uygulaması başarısız olmuştur. Operasyondan 18 ay sonra hastamız hayattadır ve sağlık durumu oldukça iyidir. Ancak tümör rekürrensi ve karaciğerdeki metastatik lezyonlarda artış mevcuttur.*

Anahtar Kelimeler: **Mide, schwannoma**

SUMMARY: *A case of giant malign gastric schwannoma was described. The presentation of tumor, measuring 25 cm at the largest, was with upper GI bleeding. The tumor was metastatic to the liver when first seen. Extirpation of the tumor with proximal stomach and spleen removel was performed. Chemotherapy was unsuccessful for liver lesions. Eighteen months after operation, the patient was alive and relatively healthy, but there was recurrence of the tumor and progression of the liver metastases.*

Key words: **Stomach, schwannoma**

SCHWANNOMAS are part of stromal tumors which also include fusiform cell sarcomas such as leiomyosarcoma and fibrosarcoma (1). Gastric schwannomas are rare. This neurogenic mesenchymal tumor of the stomach arises from the schwann cells of nerves of the gastric wall and is usually benign (2). Schwannomas may be a part of the picture of generalized neurofibromatosis (von Recklinghausen's disease) and may be associated with parathyroid adenoma which manifests itself with hypercalcemia (3,4). We report here a case of malign giant gastric schwannoma metastatic to liver, presented with upper GI bleeding.

CASE REPORT

43 year old male patient was admitted with upper GI bleeding. He denied any prior complaint. In the hospital he received four units of whole blood for correction of hemodynamic status. On physical examination a huge mass involving right and left upper and left lower abdominal quadrants was detected. On gastroscopy, there was no active bleeding. The mucosal veins of corpus appeared prominent and there were scattered submucosal hemorrhages. Computed tomography revealed a huge vascular mass in the abdomen, possibly outgrowing from stomach (Fig 1). In addition, some vascular nodules were detected in liver (Fig 1). On the third day of admission the patient's clinical condition was stable and the decision of laparatomy was made. Laparatomy was performed by a supraumbilical and infraumbilical median incision. A multilobular encapsulated tumor mass originating from lesser curvature of stomach, just below cardia and extending into right and left hypochondrium and epigastrium was seen. There was not any visible invasion to other abdominal structures and no other abnormality was noted. The tumor mass was extirpated by proximal gastrectomy and splenectomy. Esophagogastrostomy was performed as well. The tumor was of encapsulated and multilobulated nature with dimension of 25X15X14 cm (Fig 2). The tumor had invaded the wall of the stomach but the mucosal surface was intact. At the cut surface there were extensive hemorrhage, necrosis and large cavities. Histologic examination revealed stromal tumor composed of fusiform cells that invaded the wall of the stomach. Tumor cells were arranged in sweeping fascicles. Some areas showed nuclear palisading and storiform-like pattern (Figure 3a). The tumor had 1-2 mitoses per high power field. With masson trichrome stain no striation was observed. Immunohistochemically, tumor cells reacted strongly with S-100 protein (Bio Genex, USA), and weakly with neuron specific enolase

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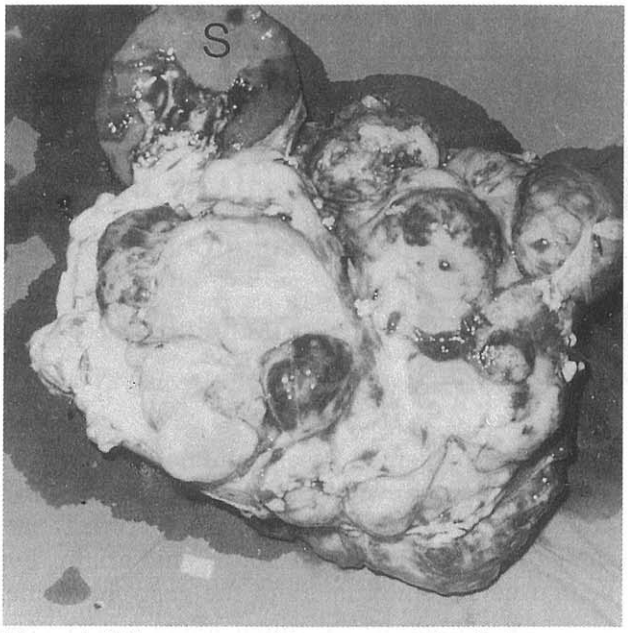

Figure 1. *CT appearance of the tumor and liver lesions.*

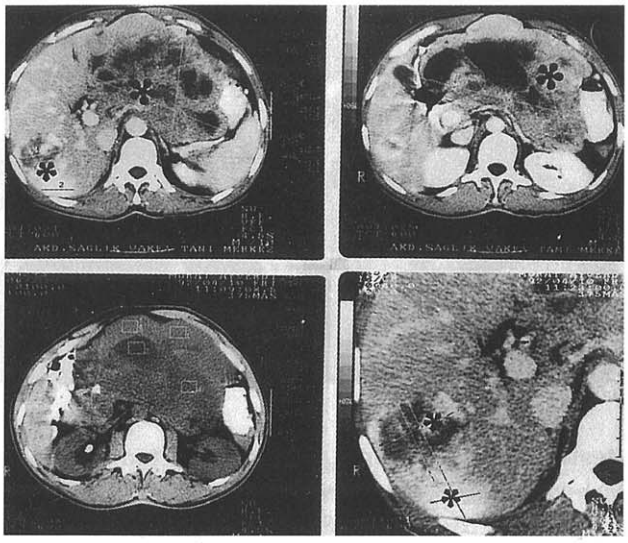

Figure 2. *Macroscopic appearance of the tumor with removed spleen.*

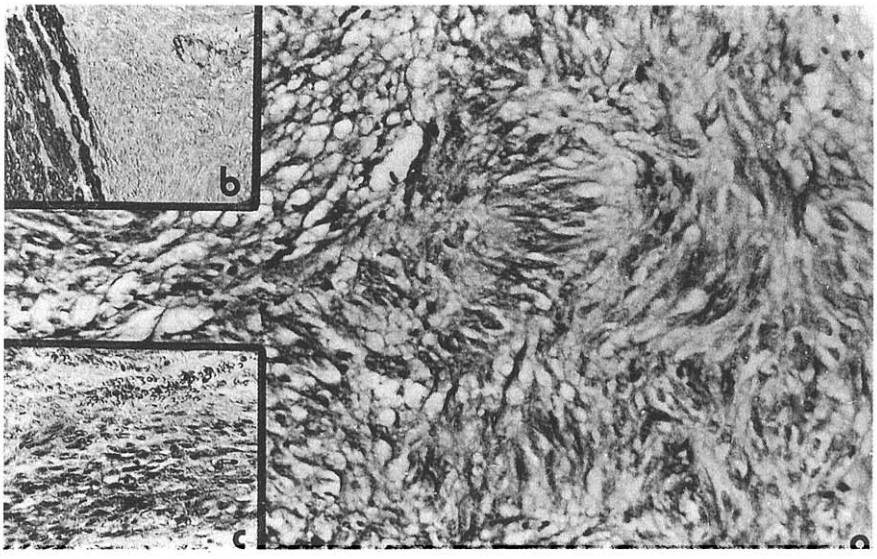

Figure 3. *a) Nuclear palisading of tumor, H/EX200.*
b) Smooth muscle tissues of the stomach were strongly stained with aktin, whereas tumor cells were unstained.
c) Tumor cells showed strong reaction with S-100 protein. X200.

(NSE) (Bio Genex), but showed no reaction with aktin (Bio Genex) (3b and c). Pathologic diagnosis was malignant schwannoma. After this pathologic diagnosis was obtained, we performed percutaneous, ultrasonography-guided, fine needle biopsy for liver lesions. Histopathologic examination of the obtained small specimens showed necrotic areas. We considered these lesions as metastasis. Chemotherapy with adriamycin and iphosphamide was started after non month of operation and maintained for seven months. The side effects were prominent. At the end of the chemotherapy, there was increase in the size of the liver lesions, let alone decrease, in ultrasonography. Chemotherapy was stopped. Six months later, the patient was much better. A repeat tomography showed a solid area measuring 2cm in the left hypochondrium, between flexura splenica and abdominal wall and there was a small increase in the dimensions of the liver lesions. The solid area was considered as scar tissue related to operation. For months later, after 18 months of the operation while the patient was asymptomatic, another tomogram was obtained. The size of the lesion in the left hypochondrium was, now, 6 cm and there were further increases in the size of the liver lesions (Fig 4). In addition, there were, newly appeared lesions in liver.

DISCUSSION

Up to our knowledge, this is the biggest gastroin-

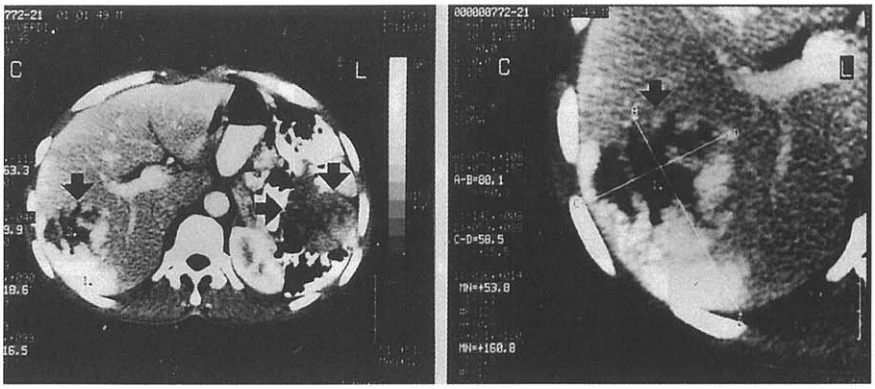

Figure 4. *CT after 18 months of operation showing recurrence of tumor and enlargement of liver lesions.*

testinal schwannoma, ever reported. Gastric schwannomas are rare and commonly present with dyspepsia, abdominal pain, anemia, or hemorrhage (5). Endoscopic findings in exogastric schwannomas are variable. In some cases tumor mass with central ulceration reported (6). In our case there was, only, prominence of mucosal veins of corpus and small ulcerations were present. Endoscopic biopsy is, commonly unyielding. Most of the neurogenic tumors of the gastrointestinal tract are benign, and these tumors may be apart of the picture of general neurofibromatosis (Von Recklinghausen's disease) (1-6). They may be associated with parathyroid adenoma as well. In our case there was neither any skin lesion suggestive of Von Recklinghausen's disease nor hypercalcemia suggestive of parathyroid adenoma and gastric schwannoma was an isolated finding. It is not always possible to separate schwannomas from the other stromal tumors histologically (1). Immunochemistry is very helpful in distinction (7). In the presented case, immunohistochemical results obtained with S-100 protein and NSE eliminated the possibilities for other stromal sarcomas and supported the neurogenic origin. For benign neurogenic tumors of the gastrointestinal tract, extirpation of the tumor offers a very good prognosis (2,5,8). In our case, which was a malignant one, despite chemotherapy there was a slow growth and increase in the number of liver lesions. After 18 months of the operation, a mass measuring 6 cm. was present at the original site of the tumor. This shows relatively chemoresistant nature of these tumors.

In summary, we presented a case of giant gastric schwannoma metastatic to liver, presented with upper GI bleeding. Despite its huge size, interestingly, it did not give rise to any complaint to the patient until the bleeding episode. After 18 months of the extirpation, the tumor recurred, and metastases progressed. Chemotherapy was unyielding.

KAYNAKLAR

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