

# Glomus Tumor of the Stomach

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**G**astric glomus tumors are rare tumors of the gastrointestinal tract originating in the neuromyoarterial glomus structure. The first case of a gastric glomus tumor was described by Key et al. in 1951 [1]. Glomus tumors of the stomach are usually benign, but malignant behavior cannot be excluded. We present a case of non-malignant glomus tumor.

## PATIENT DESCRIPTION

A 37 year old otherwise healthy woman was admitted with complaints of upper middle abdominal pain, dysphagia and a few episodes of melena. Physical examination and blood tests were within normal limits. An upper gastrointestinal endoscopy revealed no abnormality except for *Helicobacter pylori*-positive chronic

gastritis. Due to persistent abdominal pain, a computerized tomography scan of the abdomen was performed revealing a 5.9 x 6 cm antral mass. With a tentative diagnosis of a gastric gastrointestinal stromal tumor, the patient underwent an exploratory laparotomy that showed a 5 cm irregular antral mass, and a sub-total gastrectomy was performed with an uneventful postoperative course.

Pathological evaluation showed the presence of a population of round homogeneous cells with a hemangiopericytoma-like vascular pattern and no significant proliferative activity (< 2 MF/50 HPF) or necrosis along with immunopositivity for muscle-specific actin, alpha-smooth muscle actin and calponin. These features support the diagnosis of a glomus tumor [Figure].

The morphologic differential diagnosis is that of an epithelioid gastrointestinal stromal tumor. However, in this case the morphology and the immunophenotype – PDGFRA- $\alpha$  (negative) and c-kit (negative) – did not support this diagnosis. This kind of tumor is generally associated with a good prognosis, especially when atypia and direct angiolymphatic involvement are lacking.

case with our patient. However, low risk and unpredictable malignant behavior cannot be excluded. There are no data on the mode of dissemination, and the only report of metastatic spread was to the liver. Radiographic and endoscopic investigations are not specific in most cases. Glomus tumors of the stomach can be differentiated from gastrointestinal stromal tumors, carcinoid tumors, mucosa-associated lymphoid tissue lymphoma, gastric lymphoma and other types of tumor based on morphology and immunohistochemical studies [2-4]. When there are no signs suggestive of malignancy, limited resection is the treatment of choice, but there are no clinical guidelines as to when to perform a limited resection and when to perform gastric resection. The largest collected series of glomus tumors was reported by Miettinen et al. [5]. Since the overall number of cases reported is small, there are not enough data to support an active follow-up.

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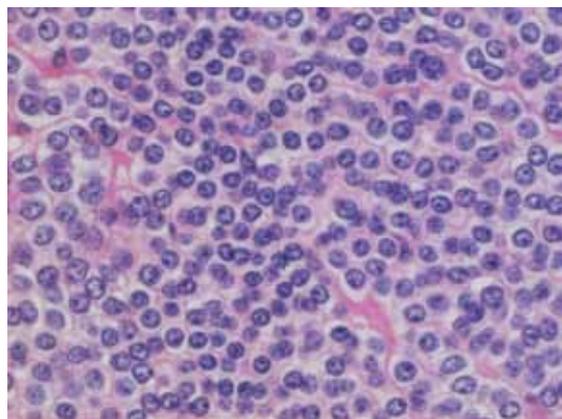
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Glomus tumor (hematoxylin & eosin, original magnification x400). The tumor consists of homogeneous, middle-sized cells with low proliferative activity



## COMMENT

The glomus body is a specialized form of arteriovenous anastomosis involved in thermoregulation [1]. Glomus tumors are typically found in peripheral soft tissues, but have also been found in other organs. The majority of gastrointestinal glomus tumors are located in the stomach. Most of these tumors are benign and associated with a good prognosis, especially when atypia and direct angiolymphatic invasion are lacking, as was the

## References

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