GLOMUS TUMOUR - A RARE SUBMUCOSAL TUMOUR OF THE STOMACH: A CASE REPORT

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Introduction

- Gastric glomus tumors are rare, mesenchymal neoplasms arising from the neuromyoarterial canal (the canal of Sucquet-Hoyer) or glomus body.
- They are generally described as benign and account for nearly 1% of all gastrointestinal soft tissue tumors.
- These submucosal tumors lack specific clinical and endoscopic characteristics, and are often mistaken for the more common gastrointestinal stromal tumors (GIST).

Case Report

- 73-year-old female patient who presented with severe anemia. Her hemoglobin (Hb) had fallen precipitously to 5 gm% and was transfused 2 units of packed RBC.
- Endoscopy (EUS) showed a polypoidal mass along the greater curvature near the gastric antrum.

CECT Abdomen

* Well defined heterogenously enhancing exophytic sub mucosal lesion of 2 x 2.3 x 1.9 cm in the distal stomach wall, just proximal to the level of the pylorus

Gross

Mucosa covered circumscribed blackish lesion measuring 1.8 cm in greatest dimension.

Histopathology

Neoplasm in the muscle layer with round cells arranged as nest and clusters around dilated blood vessels. Cells have sharply punched out nucleus, indistinct nucleoli and scant to moderate cytoplasm.

Immunohistochemistry

- Smooth muscle actin - Strong positive
- Synaptophysin - Positive
- Ki 67- < 1%
- Cd 117 - Negative

Final Impression

GASTRIC GLOMUS TUMOUR

Discussion

- The first case of gastric glomus tumor was reported in 1951 by Key et al [1].
- They are most commonly described as solitary, well-defined, submucosal lesions in the antrum.
- The most frequent complaints include epigastric pain, upper gastrointestinal bleeding and ulcerous syndrome with or without nausea or vomiting [2].
- Due to the deep location of glomus tumour, preoperative diagnosis is difficult.
- The main diagnostic modalities include endoscopic ultrasound (EUS) and computed tomography (CT), the former has an advantage in identifying the layer of tumour origin, and the latter is advantageous in tumour characterization with the use of contrast enhancement [2].
- These tumers are strongly and diffusely positive for smooth muscle actin, vimentin and actin, calponin, type IV collagen and laminin.
- Criteria for malignant glomus tumours of soft tissue proposed by Folpe et al. included: (a) Deep location and size >2cm or (b) atypical mitotic figure or (c) moderate to high nuclear grade and mitotic activity (5 mitoses/50HPF).
- For gastric glomus tumours, size >5cm is more important than the mitosis and atypia for assessing risk for malignancy [3,4].

Take home message

- Consideration of gastric glomus tumors in the differential diagnosis of submucosal gastric lesions may optimize the chance for a more accurate preoperative diagnosis and targeted surgical intervention.

References