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A RARE GIANT ABDOMINAL SCHWANNOMA MIMICKING GASTROINTESTINAL STROMAL TUMOR: A DIAGNOSTIC AND SURGICAL CHALLENGE

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Relevance. Intra-abdominal schwannomas are rare benign tumors that can closely mimic more common neoplasms such as gastrointestinal stromal tumors (GISTs). Their nonspecific clinical presentation and overlapping radiological features often lead to diagnostic uncertainty. Recognizing this entity is essential to avoid misdiagnosis and ensure appropriate surgical management.

Aim: to highlight the diagnostic challenges and surgical management of a rare giant intra-abdominal schwannoma initially suspected to be a GIST.

Materials and methods. We present a case of a 70-year-old woman with a two years history of progressive abdominal discomfort, later associated with vomiting, localized pain, and a palpable mass. Contrast-enhanced CT and MRI revealed a large cystic, solid intra-abdominal mass arising from the lesser omentum and closely related to the stomach and duodenum. A multidisciplinary team recommended surgical exploration. Intraoperative findings, surgical management, and histopathological evaluation were analyzed.

Results and their discussion. Imaging suggested a diagnosis of GIST due to the tumor's size, heterogeneous structure, and anatomical location. However, intraoperatively, a well-encapsulated mass with dense adherence to the gastric wall was identified, requiring partial gastric resection for complete excision. Histopathology demonstrated characteristic features of schwannoma, including Antoni A and B areas and Verocay bodies, with strong S-100 positivity and negative CD117 and DOG1 staining, confirming a benign schwannoma. The postoperative course was uneventful, with no recurrence at six months. This case highlights the limitations of imaging in differentiating schwannomas from GISTs and emphasizes that definitive diagnosis relies on histopathology. Complete surgical excision is curative, although operative strategy may need to be adapted due to tumor adherence to adjacent structures.

Conclusions. Giant intra-abdominal schwannomas should be considered in the differential diagnosis of large abdominal masses with inconclusive imaging. A multidisciplinary approach and complete surgical excision with histopathological confirmation are essential for accurate diagnosis and optimal outcomes.