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Image of the Month

A rare case of submucosal gastric tumor

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Gastrointestinal stromal tumours (GISTs) form the majority of submucosal tumours of the stomach. Here, we present a rare submucosal tumour: Plexiform fibromyxoma.

Endoscopic ultrasound in a 52 year-old man with iron deficiency anaemia and abdominal pain revealed a 25 × 15 mm lesion within the submucosa (Fig. 1). Resection was undertaken with a clinical suspicion of GIST.

Histology revealed a multinodular polypoid submucosal lesion infiltrating the muscularis propria, and subserosa focally, and comprising epithelioid/stellate cells against a myxohyaline stroma (Fig. 2A–C) with capillary sized arborizing blood vessels. Based on SMA positivity (Fig. 2D), negativity for DOG-1, CD117, CD34, desmin and S100, and MIB-1 <5%, a diagnosis of plexiform fibromyxoma was made. Genetic analyses showed no mutations.

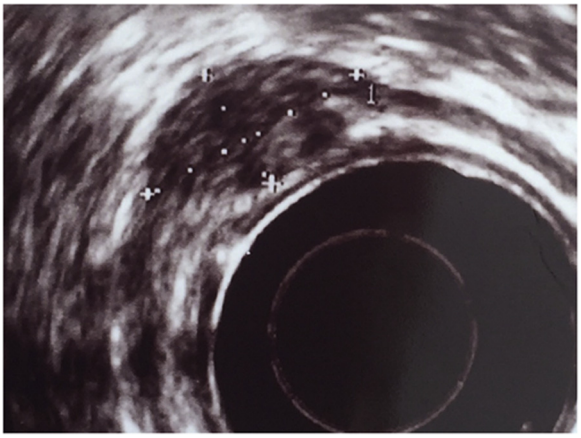

Fig. 1. Endoscopic ultrasound shows a well-circumscribed 25 × 15 mm raised nodular hypoechoic lesion within the submucosal plane, positioned along the greater curve of the antrum.

33 reported cases show a wide age range and gastric antrum involvement in 88% of cases [1]. Although GISTs may present as extramural polypoid gastric mass [2], the presence of multiple subserosal nodules is not a feature of GIST and should prompt the differential diagnosis of plexiform fibromyxoma on endoscopic ultrasound. The microscopic features as described above are very unique in allowing an unequivocal diagnosis of plexiform fibromyxoma. SMA expression indicates a myofibroblastic phenotype. No atypia and a very low mitotic rate confirms its benign nature [1,3].

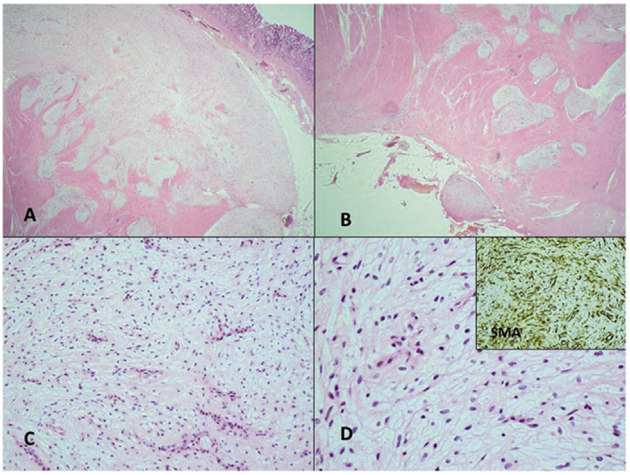

Fig. 2. A–D Histology reveals a polypoid submucosal lesion (A) that infiltrates through the muscularis propria focally into the subserosa (B). The mass is composed of loosely arranged spindle to oval shaped epithelioid and stellate cells, positive for SMA, against a myxohyaline stroma(C–D).

Awareness of the endoscopic ultrasound appearances amongst clinicians, and the unique morphology will help distinguishing plexiform fibromyxoma from the more common and aggressive GIST.

Conflict of interest

None declared.

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