Submucosal Tumor of the Stomach?

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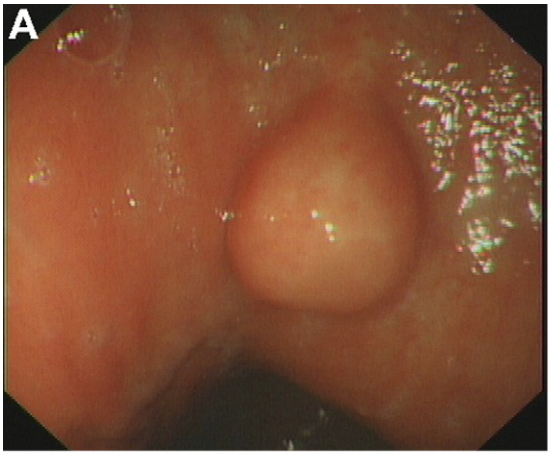

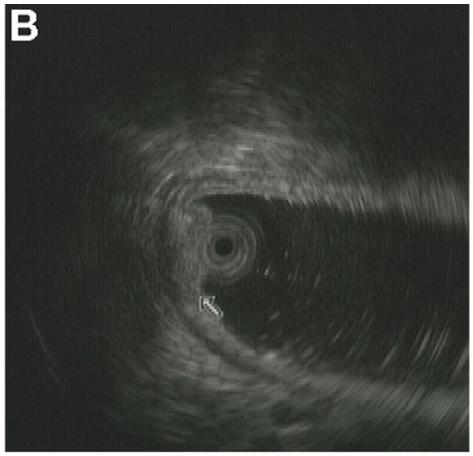

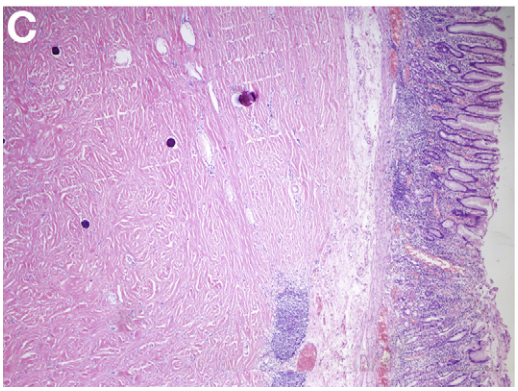

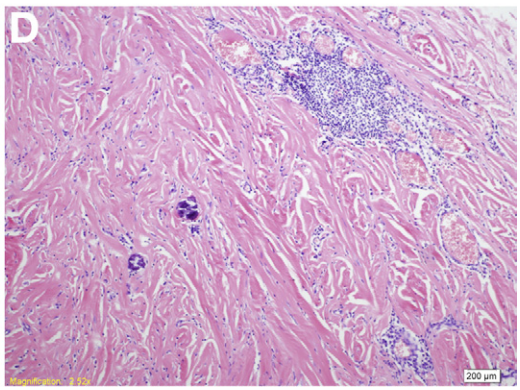

Question: A 54-year-old Chinese woman was admitted to our hospital with a 4-year history of intermittent, dull epigastric pain. The pain was especially obvious with fatigue and was sometimes relieved by cimetidine hydrochloride. Physical examination was unremarkable, except for epigastric tenderness. Endoscopic examination revealed a 1.5 × 1-cm, polypoid lesion covered by normal mucosa in the anterior stomach lining (Figure *A*). Endoscopic ultrasonography showed a focal hypoechoic lesion with some hyperechoic foci that involved the submucosa (Figure *B*). Computed tomographic imaging of the upper abdomen with contrast enhancement demonstrated that the gastric lesion was a round, well-circumscribed mass with homogeneous attenuation and slight enhancement. Endoscopic submucosal dissection (ESD) was performed to excise the lesion. Grossly, the submucosal specimen measured 1.2 × 0.8 × 0.5 cm^3 with a well-circumscribed and firm nodule beneath the overlying normal gastric mucosa. When the nodule was transected, a solid, gray-white, fibrous matrix was revealed without hemorrhage or necrosis. Microscopically, the submucosal nodule was nonencapsulated and composed of abundant hypocellular hyalinized collagenous tissue with scattered cytologically bland spindle cells (Figure *C*). The hyalinized stroma was arranged in groups and interspersed with patchy lymphoplasmacytic infiltration, lymphoid aggregates, and dystrophic calcifications (Figure *D*). Immunohistochemistry revealed that most spindle cells were positive for XIIIa and vimentin, and negative for CD117, DOG-1, CD34, desmin, α-smooth muscle actin, S-100, anaplastic lymphoma kinase, and β-catenin.

Considering the imaging findings of the lesion, what is the likely diagnosis?

See the GASTROENTEROLOGY web site (www.gastrojournal.org) for more information on submitting your favorite image to Clinical Challenges and Images in GI.

Acknowledgments: T.L. and P.L. contributed equally to this work and share first authorship. Supported in part by grants from the National Natural Science Foundation of China (Nos. 30771120 and 81072103).

Conflicts of interest: The authors disclose no conflicts.

0016-5085/$36.00
http://dx.doi.org/10.1053/j.gastro.2012.02.048

Answer to the Clinical Challenges and Images in GI Question: Image 6: Calcifying Fibrous Pseudotumor

Calcifying fibrous pseudotumor (CFT) mainly occurs in the subcutaneous or deep soft tissues of children and young adults, especially at the level of the extremities, trunk, neck and scrotum.[1,2] Thirteen cases of gastric CFT have been reported to date, of which 10 cases lacked obvious symptoms and were found incidentally at autopsy or during examinations or surgery for other diseases.[3] Symptoms include epigastric pain, weight loss, and occasional hemorrhage owing to ulcerations. In the present case, the patient had epigastric pain, but because this was relieved by antacid reagents, it is likely that the pain was not associated with the gastric CFT. The incidence of gastric CFT might be higher than previously assumed, and it must be included in the differential diagnosis when a polypoid lesion is found in the gastric wall.

Most gastric CFTs are usually excised by a partial gastric wedge resection or endoscopic mucosal resection (EMR). For this case with a relatively large CFT, we chose ESD, because this procedure achieves a higher complete resection and remission rate than EMR. The patient's postoperative course was uneventful, and no recurrence was found after 1 year.

References

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