Primary gastric tuberculosis

Primary gastric tuberculosis is rare, and the diagnosis depends on a high index of suspicion [1]. We present a case of gastric tuberculosis and gastric submucosal tumor with an unusual appearance in an immunocompetent adult with no pulmonary involvement.

A 68-year-old man presented with epigastric pain, which he had been having for a few months. He had been referred to us for a suspected gastric tumor following an endoscopy at another hospital. An abdominal computed tomography (CT) scan revealed a 4 × 3 cm mass with homogeneous density arising from the greater curvature of gastric antrum and infiltrating the surrounding omentum (Fig. 1). The mass was suspected to be a gastric tumor with perifocal invasion.

Gastroscopy showed an enlarged gastric fold, about 3–4 cm in size, over the lower part of the body of the stomach and extending into the antrum on the side of the greater curvature. A small ulcer is seen on the top (Fig. 2).

Endosonography showed the lesion extending into the deep mucosa and the submucosal layer of the thickened gastric wall. The muscularis propria was mildly thickened (Fig. 3).

Histopathological examination of the surgical specimen revealed necrotizing granulomatous inflammation with foci of Langerhans giant cells with multiple peripherally located nuclei (Fig. 4).

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The patient underwent subtotal gastrectomy and segmental resection of the transverse colon because the lesion was adherent to the mesocolon and the transverse colon, mimicking a localized malignancy. Histopathological examination of the surgical specimen revealed necrotizing granulomatous inflammation with foci of Lan-

Fig. 1 Axial contrast-enhanced computed tomography (CT) scan showing a homogeneous density, 4 × 3 cm, enhancing mass with foci of low attenuation, arising from the greater curvature of gastric antrum and infiltrating the surrounding omentum. The mass was suspected to be a gastric tumor with perifocal invasion.

Fig. 2 Enlarged gastric fold, 3–4 cm in length, in the lower part of the body of the stomach and extending into the antrum on the side of the greater curvature. A small ulcer is seen on the top.

Fig. 3 Upper gastrointestinal endosonography showing conspicuous thickening of the gastric wall over the lower body, up to the antrum, with infiltration of the lesion into the deep mucosa and the submucosal layer. The muscularis propria was mildly thickened.

Fig. 4 Necrotizing granulomatous inflammation involving all the layers of the gastric wall and the gastric mucosa, with ulceration. The lesion was adherent to the mesocolon. Langerhans giant cells with multiple peripherally located nuclei are seen in the granuloma.
germans giant cells, involving the whole

Acid-fast staining
did not reveal any acid-fast bacilli, but a
polymerase chain reaction (PCR) test for
tuberculosis was positive. Accordingly, a
diagnosis of gastric tuberculosis was
made.

The patient’s condition stabilized post op-
eratively and he was discharged.

Tuberculosis may involve any part of the
gastrointestinal tract, in particular, the
ileocecal region [2], and mostly occurs
secondary to pulmonary or other system-
ic tuberculosis. Primary, isolated gastric
tuberculosis is rare, and gastric tuberculo-
sis sometimes mimics gastric cancer. [3]
which occurs in about 10% of gastric tu-
berculosis cases [4]. If gastric tuberculosis
is clinically suspected, PCR test of the
biopsy specimen provides a faster, alter-
native route for diagnosis while excluding
Crohn disease with 100% specificity and
27%–75% sensitivity [5].

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