Fat-Containing Giant Hamartoma of the Stomach

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Gastric hamartoma is considered to be a rare disease entity, usually associated with polyposis syndrome. We report a case of unique and distinguishable fat containing unusually large gastric hamartoma and gastrointestinal bleeding. The patient had no history of polyposis syndrome.

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Gastric hamartoma is considered to be a rare disease entity and is usually associated with polyposis syndromes such as familial polyposis coli, Cowden syndrome, Peutz Jegher syndrome, and Cronkhite-Canada syndrome (1, 2). A few reports have described a gastric hamartoma without polyposis coli (3-5). It is often overlooked due to its clinical insignificance and small size. We report a case of an unusually large sized, fat-containing gastric hamartoma combined with gastrointestinal bleeding.

Case Report

A 68-year-old man presented with an acute onset of melena and a 2-year history of epigastric pain. His family history was negative for familial polyposis coli. A physical examination revealed anemic conjunctiva and no mucocutaneous melanin pigmentation. The patient’s hemoglobin and hematocrit levels were 8.6 g/dL (normal 13.5-17.5 g/dL) and 24.9% (41-53%), respectively. As a result, six pints of packed red blood cells were transfused to the patient to restore his hemoglobin hematocrit levels to 12.0 g/dL and 34.7%, respectively. A gastroscopy revealed a huge mass on the high body with intact overlying mucosa. A blood clot within the ulcer was seen on the mass, however active bleeding foci were not found. A barium study revealed a huge, lobulated, pedunculated mass in the gastric body (Fig. 1A). A computed tomography (CT) scan of the abdomen showed a huge complex cystic and solid mass with fat components in the gastric body (Fig. 1B).

The patient underwent a complete gastrectomy. The gross specimen revealed a polypoid mass measuring 13 × 9 cm with a short pedicle attached to the anterior wall of the gastric high body. The final pathologic diagnosis was gastric hamartoma with cystic change (Figs. 1C-E).

Discussion

Gastric hamartoma is a rare occurrence in patients without familial polyposis coli with an incidence rate of only 0.085% (23 of 27,000 cases) (3). However, incidence among endoscopically biopsied polyps is much
higher. Sato et al. (4) found hamartomatous polyps in 11% (25 of 222 cases) of their endoscopic studies.

In contrast to gastric hamartomatous polyps with polyposis coli which is detected in younger patients without gender preponderance, gastric hamartomatous polyps without polyposis coli is primarily found in middle-aged women (3-6). Although the pathogenesis of gastric hamartomatous polyps without polyposis coli is

![Fig. 1. Giant gastric hamartoma with a fat component.](image)

A. Double contrast radiograph of the stomach shows a huge lobulated intraluminal mass on the gastric body. Note its pedicle near the esophagogastric junction.

B. Contrast-enhanced computed tomography scan of the upper abdomen shows a huge cystic and solid mass in the gastric body. Note the fat components (arrows) in the mass (-70 HU).

C. Photograph of the gross specimen shows a huge polypoid mass arising from the anterior wall of the gastric body attached proximal to the esophagogastric junction by a short pedicle.

D. Cut surface of the specimen shows multifocal cystic change with yellowish adipose tissue components.

E. Photomicrograph of the specimen shows multiple lobules of fundic and pyloric type gastric glands with cystic change. Note the abundant adipose tissue mixed with glandular components. (Stained with hematoxylin and eosin; magnification × 200)
unknown, female preponderance suggests a nonautosomal gender-linked influence (6).

Clinically, gastric hamartoma is asymptomatic or may cause mild upper digestive symptoms such as epigastric pain, epigastric discomfort, heartburn, and nausea (3-5). There has been a previous report of gastric hamartoma with gastrointestinal bleeding (7).

Hamartomatous polyps of the stomach are mostly presented as multiple sharply demarcated, round, smooth-surfaced, sessile polyps of 10 mm or less (3-6). Rarely, they grow over 10 mm or become pedunculated (3, 8). Cases of gastric hamartoma greater than 10 mm were found exclusively in the gastric fundus and body (3-6). To the best of our knowledge, the largest gastric hamartoma reported in the English literature was 25 mm in diameter (3).

The clinical and imaging features of this largest recorded case are unique and distinguishable from other gastric hamartoma. First, our case presented with significant upper gastrointestinal bleeding. Second, its size was far beyond the usual size of gastric hamartoma. Last, the mass contained a detectable fat component on CT as usually seen in pulmonary hamartoma. The fat component has been considered a reliable indicator of pulmonary hamartomas (9).

In conclusion, the findings of a single case cannot be generalized to others without scientific verification. Nevertheless, gastric hamartoma may be included in the range of differential diagnoses of a complex cystic and solid mass with a definite fat component in the gastric fundus or body.

References

지방을 포함하는 거대 위 과오종 : 증례 보고

김예림 ∙ 최재웅 ∙ 이종미 ∙ 이창희 ∙ 김경아 ∙ 박성수 ∙ 이주한 ∙ 박철민

위에 발생한 과오종은 다발성용종증과 동반되는 드문 질병이다. 다발성용종증의 과거력이 없는 환자에서 임상적으로 위장 내 출혈을 일으킨 크기가 크고 지방을 포함하는 비정형적인 거대과오종에 대해 보고하고자 한다.