

A Giant Gastric Adenoma Embedded in the Duodenum

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ABSTRACT

Gastric adenomas are usually located in the antrum, or occasionally in the fundus of the stomach. Most adenomas are solitary, pedunculated mass. The report describes a 17-year girl who visited the emergency room with complaints of stabbing pain of upper abdomen, nausea, vomiting and melena for last one week. Emergency endoscopic examination revealed a giant polyp with a long about 15 cm pedicle embedded in the duodenum. The polyp was completely removed by surgery, about 15 x 3 x 4 cm in size. At 5-year follow-up by endoscopy and ultrasonography, the patient remained in good general condition. It emphasizes that giant gastric adenomas must be removed by endoscopy or surgery due to its potential of malignancy. It is necessary to follow-up for detecting early gastric neoplasm.

Key Words: Gastric adenoma. Duodenum. Endoscopy. Surgery. Giant polyp.

INTRODUCTION

Gastric adenomas are defined as circumscribed, polypoid lesions, composed of tubular and/or villous structures, lined by dysplastic epithelium. Adenomas tend to progress to gastric carcinoma, even with low-grade dysplasia.^{1,2} Gastric adenomas are lobulated or pedunculated lesions larger than 1cm on double-contrast barium upper gastrointestinal examination.^{2,3}

The knowledge, it was rare that a giant gastric adenoma with a long pedicle, about 15 cm in length, was embedded in the duodenum.

CASE REPORT

A 17-year girl visited the emergency room with complains of stabbing pain of upper abdomen, nausea, vomiting and melena for the last one week. The patient had been diagnosed with chronic gastritis for more than 10 years. She denied family history of genetic diseases. On her initial visit, she did not look obviously pale on physical examination, but the haemoglobin level was 9.9 g/dl and her other laboratory investigations were within normal limits. An emergency endoscopic examination revealed a giant polyp with a long pedicle embedded in the duodenum, which was about 15 cm in length. The polyp appeared as a focus of erosion and redness (Figure 1).

Then the patient was admitted to the hospital. Seven days after endoscopic examination, the patient was in stable condition. Double-contrast barium examination was conducted which showed a giant filling-defect was

located at the prepyloric region, about 5.5 x 3.5 cm in size. Only a small amount of barium entered the duodenum (Figure 2). The diagnosis was a giant gastric polyp that was embedded in the duodenum. The abdomen, including liver, gallbladder, pancreas, spleen, kidneys, and portal venous flow, was normal on ultrasonographic examination.

Because it was a giant polyp with incomplete obstruction of the duodenum and the risk of bleeding from endoscopic resection was high, the surgeons decided to remove the polyp by surgery. In the operation, the giant polyp was located in posterior gastric wall, which obstructed the first and second parts of the duodenum lumen, about 15 x 3 x 4 cm in size. The polyp was lobulated, soft, dark red and had abundant blood supply. The lesion was completely removed, which was diagnosed with a gastric tubular adenoma with moderate to severe grade dysplasia on histopathology (Figure 3). At 5-year follow-up by endoscopy and ultrasonography, the patient was in good general condition and no recurrences or metastases were found.

DISCUSSION

Most adenomas are solitary, pedunculated masses, and rarely flattened or slightly depressed lesion. The gastric adenomas are divided into tubular, villous and tubulovillous, which are subdivided into those with mild, moderate and severe dysplasia according to the degree of dysplasia. It is known that gastric adenomas can progress to gastric carcinomas and the probabilities were in 3.4% - 75%.^{4,5} The malignancy risk factors include gender, age, histopathological type, dysplasia grade, morphology, colour, number, size, location, and number of biopsy. It is known that the incidence of malignancy increases when adenoma is larger in size, especially more than 2 cm in diameter, red in colour, central depressed with ulcer, villous structure and severe dysplasia.^{6,7}

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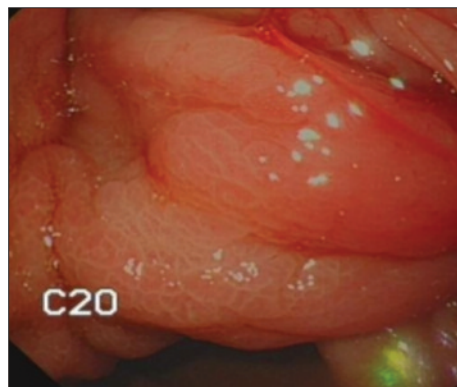


Figure 1: The endoscopic examination shows a large polypus with a long pedicle enters the duodenum, which was blocked.

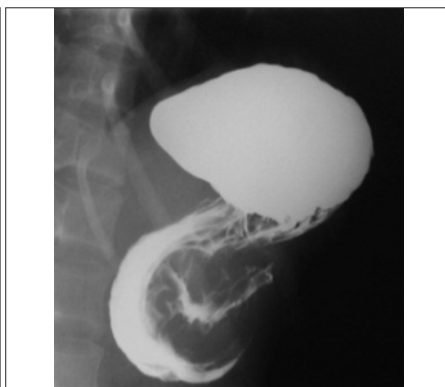


Figure 2: The double-contrast barium examination shows that a large filling-defect is located at prepyloric region.

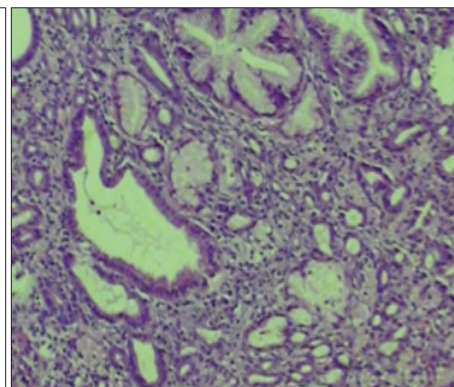


Figure 3: (HE x100) The pathologic examination shows that an adenoma contains various sizes of tubular glands with moderate to severe grade dysplasia.

Gastric adenoma must be completely resected because of the potential of malignancy. Moreover, it was very important to follow the patients with pre-malignant gastric lesions.⁷ Endoscopy in follow-up may aid the detection of secondary lesions, especially for patients with advanced age (> 65 years).⁸ The optimal interval between endoscopic examinations for detecting early gastric neoplasm is described as 2 years.⁹

In conclusion, the case describes a giant gastric adenoma with a long pedicle, which embedded in the duodenum and was completely removed by surgery. It is vital to emphasize that giant gastric adenomas must be managed by endoscopic therapy or surgical operation to prevent malignancy. Furthermore, it is important to follow-up for detecting early gastric neoplasm.^{8,9}

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