Acute Gastric Bleeding Due to Giant Hyperplastic Polyp

Dev Hiperplastik Polibe Bağlı Akut Gastrik Kanama

Dev Mide Polibi / Giant Gastric Polyp

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Özet

Hiperplastik gastrik polipler midenin en sık görülen benign lezyonlarındandır. Sıklıkla multiple, küçük ve asemptomatiktirler, özefagogastroduodenoskopi veya radyolojik incelemeler sırasında insidental olarak tanı konulur. Dev hiperplastik polipler oldukça nadirdirler ve çoğunlukla asemptomatiktirler. Altmışaltı yaşında bayan hasta akut gastrik kanama ile başvurdu. Gastrin seviyesi normal hastaya yapılan özefagogasrtroduodenoskopide mide antrumdan kaynaklanan yaklaşık 12 cm çapında geniş saplı difüz kanama bulguları gösteren polip izlendi ve biyopsiler alındı. Hastaya subtotal gastrektomi + Roux-N-Y gastrojejunostomi ameliyatı yapıldı. Patoloji sonucu yer yer ülserasyonların ve stromada iltihabi granülasyon dokusunun izlendiği hiperplastik polip olarak bildirildi. Akut üst gastrointestinal kanamaların ayırıcı tanısında dev hiperplastik polipler akılda tutulmalıdır.

Anahtar Kelimeler

Gastrointestinal Kanama; Hiperplastik Polip; Mide; Gastrektomi

Abstract

Hyperplastic gastric polyps account for the majority of benign gastric polyps. The vast majority of these lesions are small, asymptomatic and found incidentally on radiologic or endoscopic examination. Giant hyperplastic gastric polyps are uncommon and most of them are asymptomatic. We report a case of a 66-year-old woman who admitted because of acute gastric bleeding. The gastrin levels were within normal ranges. Esophagogastroduodenoscopy showed 12 cm pedunculated and multiple lobulated hyperplastic polyps arising from antrum with signs of diffuse oozing. The patient is treated by subtotal gastrectomy with Roux-Y gastrojejunostomy. Histological examination showed the presence of ulcers and regeneration findings with the contemporary occurrence of hyperplastic polyp. Giant hyperplastic gastric polyp should be kept in mind in the differential diagnosis of acute upper gastrointestinal bleeding.

Keywords

Gastrointestinal Bleeding; Hyperplastic Polyp; Stomach; Gastrectomy

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Introduction

Gastric polyps are frequently found incidentally when upper gastrointestinal endoscopy is performed for any indication. (Approximately 6% of upper gastrointestinal endoscopic procedures in United States [1]). These lesions rarely cause symptoms or clinical signs. However, these polyps carry significant importance because of their malignant potential. Hyperplastic gastric polyps account for the majority of benign gastric polyps. Hyperplastic polyps, fundic gland polyps, gastric adenomas and some of gastric carcinoid tumors may present as a gastric polyp. These lesions usually occur in the antrum, but may occur in the other regions of stomach as well. Polyps greater than 2 cm are at significant risk for malignancy and they require complete resection [2]. When cause symptoms, these polyps may present with occult gastrointestinal bleeding or obstruction, rarely [3].

Case Report

A 66 years old woman with congestive heart failure in her medical history came to the emergency room with acute gastric bleeding. She was suffering from nausea, hematemesis, vomiting, weakness, palpitation, abdominal pain, melena and rectal bleeding. Physical examination revealed marked tachycardia 120 b/min, blood pressure 80/60 mmHg pallor, pretibial edema and S3 gallop rhythm with auscultation. Laboratory data revealed severe iron deficiency anemia with hemoglobin level of 7.5 g/dl and mean corpuscular volume of 62.3 fL. The red cell distribution width was 29.8 and the reticulocyte count was 3%. On further investigation, the serum iron level was low at 13 mcg/dl, total iron binding capacity (TIBC) was elevated at 386 mcg/dl and the transferrin saturation was low at 2,7%. Serum ferritin level was 4,5 ng/ml, the vitamin B-12 level was 1394 pg/ml and all other biochemical work up for anemia was within normal ranges. As part of upper gastrointestinal bleeding work up endoscopy and endoscopic biopsies were performed urgently. The esophagogastroduodenoscopy showed a giant pedunculated hyperplastic polyp arising from antrum. Diffuse oozing and numerous diffuse polyps of varying size and shape filling the antrum were noticed (Figure-1). On the first day of admission 4 units of erythrocyte suspension and 4 units of fresh frozen plasma transfusion were performed. After transfusion and intravenous hydration patient's vital findings are stabilized. Hemoglobin level was 10,5 g/dl. On the second day of admission echocardiography was performed. Ejection fraction was determined as 45% and minimal pericardial effusion detected. Second look esophagogastroduodenoscopy showed that the bleeding has stopped. After cardiology consultation, treatment of heart failure is regulated. Histopathological examination was reported as hyperplastic polyp with the contemporary occurrence of foveolar hyperplasia.

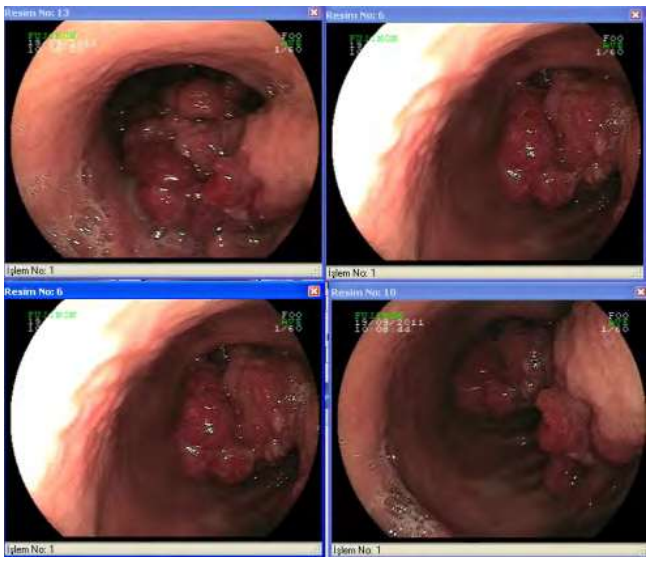


Figure 1. Endoscopic image of pedunculated polyp arising from antrum

The patient underwent a subtotal gastrectomy with Roux-Y esophagojejunostomy reconstruction on the fourth day of admission. Open surgery preffered due to patient's cardiac status. Inspection of the specimen showed that the polyp has the largest diameter of 12cm. No postoperative complications occured and the patient is discharged on the postoperative sixth day.

The histopathological examination of the specimen confirmed the presence of hyperplastic polyp with the contemporary occurrence of foveolar hyperplasia, ulcers and regeneration findings mixed hyperplastic and adenomatous polyps, and adenomatous polyps with a tubular pattern. Some polyps had aspects of serrate adenoma. Atrophic gastritis with intestinal metaplasia was also present, with no morphological and histochemical evidence of Helicobacter pylori infection.

Discussion

Gastric polyps can be classified as hyperplastic, adenomatous, fundic or inflammatory polyps. Hyperplastic polyps account for 25-90% of gastric polyps [4,5]. Most gastric polyps have asymptomatic presentations and are incidental findings on upper endoscopy with an incidence of approximately 6% [1]. Their pathogenesis is unknown but the vast majority of hyperplastic polyps occur as multiple lesions often arising from inflamed gastric mucosa [6]. Infection of the gastric mucosa with Helicobacter pylori has been reported in up to 90% of the cases. The non bacterial causes are chemical or reactive gastritis [4]. However our patient did not have any documented history of Helicobacter pylori. Polyps can ocur in any part of the stomach. Hyperplastic polyps were most common in the antrum (60%). Multiplicity of hyperplastic polyps and a proximal location are common in patients with autoimmune gastritis [7]. Pathologically, they are characterized by dilated, tortuous gastric foveoli set within an inflamed, edematous stroma [8].

Symptomatic presentations can range from an ulcerated polyp leading to anemia and occult bleed to complete gastric outlet obstruction [9]. In fact, in a series of 987 patients by Al-Haddad et al [10]. the incidence of hyperplastic polyps in iron-deficiency patients was reported to be 1.4% and the largest polyp was 5 cm in diameter. Anemia is the most frequent clinical manifestation of diffuse gastric polyposis [11]. Carcinomatous transformation of isolated hyperplastic polyps is rarely reported, occurring in less than 2% of cases. The risk increases when they are associated with pernicious anaemia [12,13].

Hyperplastic polyps can vary in size from a few millimeters to several centimeters, with the largest polyp reported being 9 cm [6]. Average size of hyperplastic polyps is approximately 1 cm in maximal diameter. In our case the size of the polyp was 12 cm. Giant hyperplastic gastric polyps are fairly uncommon. Patients with hyperplastic polyps, greater than 3 cm in largest diameter,

are more likely to be symptomatic. These giant hyperplastic polyps represent about 2% of all hyperplastic polyps. These lesions may result from merging of focal clusters of small hyperplastic polyps, and become a conglomerate mass. They are seen as smooth, lobulated masses in the antrum [14]. Also, there are reported cases of pancreatitis and duodenal mass and pancreatitis due to giant gastric hyperplastic polyps in the literature [15]. On searching the PubMed database (www.ncbi.nlm.nih.gov/PubMed) for hyperplastic gastric polyps, we found three cases of hyperplastic gastric polyps, presenting with acute upper gastrointestinal bleeding [16-18]. The polyp became an obstacle inside the lumen of duodenum causing obstruction in the first mentioned patient and hematemesis was resulted in due to secondary hypergastrinemy. Polyps were not large in the other two cases and anticoagulant drug utilization was blamed for bleeding etiology. Endoscoping hemoclipping was the treatment procedure for bleeding in the case reported by Okana et al [17]. Gastric wedge resection was applied for the polyp localised to the smaller curvature of stomach in the case reported by Nayuda et al [18]. In our case the patient came to the emergency room with sings of acute upper gastrointestinal bleeding as hematemesis, melena and rectal bleeding. There is no anamnesis of anticoagulant drug utilization in our case. The probable reason for bleeding was the enlargement of the polyp into huge size and the patient had to had subtotal gastrectomy for this reason. In our case the size of the polyp is quite remarkable. But the main point to be taken into consideration is the need for radical surgery for patient. There is no alternative treatment other than radical gastrectomy for the gastric polyp which is in giant diameter and causes severe bleeding.

In conclusion, giant hyperplastic gastric polyp should be kept in mind in the differential diagnosis of acute upper gastrointestinal bleeding. Endoscopic management of small sized gastric polyps prevents future feasible complications.

Competing interests

The authors declare that they have no competing interests.

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