CASE REPORT

Endoscopic Removal of Giant Rectal Polyp in a Child – A Case Report

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ABSTRACT

Solitary pedunculated juvenile rectal polyp is a recognized cause of painless rectal bleeding in preschool age children; however, giant juvenile polyps (greater than 30 mm) are exceedingly rare in children. A 10 year old boy with prior history of something coming out of rectum for one year presented with sudden onset of massive painless hematochezia. On evaluation a giant rectal polyp measuring 3 x 3 x 2 cm was found and removed endoscopically. Histological evaluation revealed juvenile adenomatous polyp. To best of our knowledge this is the second case reported where the giant rectal polyp was removed endoscopically in pediatric age group. (*J Dig Endosc* 2013;1(4):.....)

Key Words: Giant rectal polyp – Endoscopic polypectomy – Child

Introduction

Juvenile polyps (JP) usually present in preschool age children, the highest frequency between 4 to 5 years of age. They commonly present with painless passage of bright red blood per rectum. The bleeding is usually intermittent, mild and associated with a normal stool pattern. Occasionally, low-grade chronic bleeding leading to iron deficiency anemia may be observed. Rectal JP often present with anal prolapse of the polyp or rectal mucosa. Some long stalk polyps may present with abdominal pain from colo-colic intussusceptions and probably secondary to the mass effect of larger polyps. Some JP are completely asymptomatic. [1]

Although JP may occur anywhere in the colon, the most common sites for a solitary juvenile polyp is the rectum and sigmoid colon. In reviewing several reports on pediatric JP experience, approximately 75% of all JP were solitary, approximately 90% were found distal to the splenic flexure, and in over 95% of cases there was no family history of polyps. Their sizes varied from 3 mm to 2 cm. [2] Histological examination of JP typically reveals retention polyps with irregular shaped epithelial glands and mucus deposits which have low, but real, risk of malignant transformation. Possible complications of JP include intussusception, rectal prolapse and abdominal pain. Protein losing enteropathy resulting in hypoproteinemia and rarely finger clubbing may be noted, especially with multiple or large sized polyps. There are few reports of massive rectal bleeding in children associated with juvenile polyposis syndrome. [3]

Case Report

A ten year old previously healthy child presented to the emergency room with a sudden onset of painless massive hematochezia, pallor, poor perfusion, tachycardia (heart rate 118/min) with hemoglobin of 6 gm/dl. He had prior history of something coming out of rectum for one year for which he was given symptomatic treatment. There was no family history of polyposis syndromes or bleeding tendency. He had

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no history of recent fever or diarrhea, nonsteroidal anti-inflammatory drug use or abdominal trauma. He had no pigmented lesions or telangiectasia on his lips or oral mucosa, skin purpura or finger clubbing. There was no evidence of Meckel's diverticulum on the radio isotope scan and no infectious agent was identified on appropriate stool studies. There was no evidence of mechanical obstruction seen on plain X-rays of the abdomen.

Following 2 units of packed red blood cell transfusion and adequate hydration, the rectal bleeding spontaneously stopped within 12 hours after hospitalization and the child passed non bloody stools. An upper GI endoscopy and colonoscopy were performed. Colonoscopy revealed a giant pedunculated solitary polyp in the rectum 7cm from anal verge. There was no active bleeding. Interestingly, the polyp was aligned such that the endoscope viewed its long stalk. There were no other lesions on endoscopic evaluation of the entire colon, the terminal ileum or the upper gastrointestinal tract. Endoscopic removal of the rectal polyp was done with Captiflex medium oval flexible polypectomy snare (Boston Scientific) having a loop diameter of 27mm. No major difficulty was encountered while resecting the polyp. While in basket, the polyp could not pass across the anal canal owing to its large size and finally had to be retrieved manually. On retrieval it measured 3 x 3 x 2 cm, and the stalk was 1.8 cm in length and 0.9 cm in diameter (Figure 1). Histological evaluation of the polyp revealed features of a juvenile inflamed adenomatous polyp (Figure 2). There was no evidence of dysplasia or malignancy.

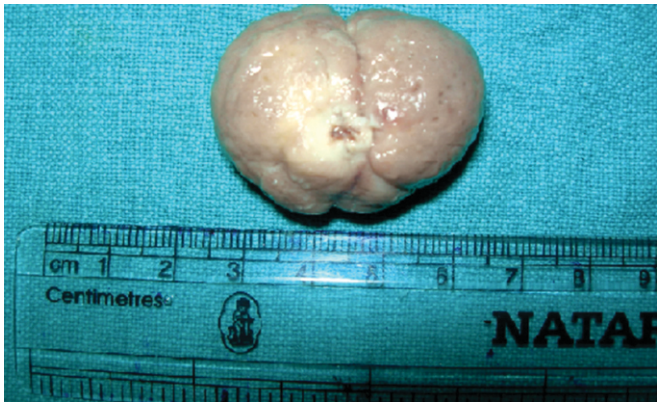

Figure 1: Resected Giant Rectal Polyp (3 x 3 x 2cm)

The child recovered uneventfully and had no further episodes of hematochezia or drop in hemoglobin levels, when last evaluated 6 months after his discharge.

Discussion

Giant solitary juvenile polyps (greater than 30 mm size) are exceedingly rare. To our knowledge, only ten solitary juvenile polyps in children with sizes similar to that found in this patient have been reported.[4,5] Exsanguinating rectal bleeding from a solitary juvenile polyp is exceptionally rare.

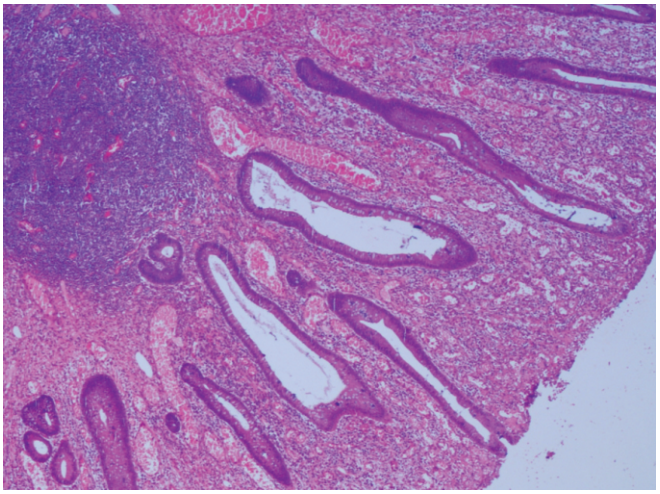

Figure 2: Resected Giant Rectal Polyp (3 x 3 x 2cm)

Murakami *et al* reported massive lower GI bleeding with a drop of hemoglobin to 5.8 gm/dl in a 24-year-old woman requiring an emergent colectomy.[6] She had a giant solitary juvenile polyp, identified only after examining the removed colon as the source of her bleeding. Corrado and colleagues reported a 7-year old boy with recurrent rectal bleeding episodes from giant solitary JP, which was successfully removed by polypectomy. However, the magnitude of rectal bleeding episodes was not further characterized.[4]

There are several reports of successful endoscopic polypectomy of giant size polyps in adults using recent haemostatic techniques and assisted by endoscopic ultra-sound to determine local invasion.[7,8] A case report by Dahshan reported a child with massive bleeding and abdominal pain, where he went for elective surgical resection due to the large size and undetermined local invasion.[9]

To the best of our knowledge this is the second case reported in world literature and the first from India where the giant polyp was removed endoscopically. However, the choice of optimum removal technique for giant polyps in children should be individualized. This case had several unusual aspects, unusual history of prolapse for one year, the giant size of polyp and the life threatening bleeding. As illustrated by this case report, in a child with massive hematochezia JP should still be considered in the differential diagnosis.

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