Unexplained Abdominal Pain Due to a Juvenile Polyp: A Case Report

Juvenil Polip Nedeniyle Açıklanamayan Karın Ağrısı: Olgu Sunumu

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SUMMARY

The most frequent clinical presentation of a juvenile polyp is painless rectal bleeding. We report a case of a 12-year-old boy who presented with unexplained abdominal pain and difficulty defecating but no rectal bleeding. A digital rectal examination showed no external hemorrhoid, anal fissure or other anal disease. However, a mass with stalk was detected about 5 cm above the anal verge. The mass suddenly exited the anus during the rectal examination and was diagnosed as a hamartomatous juvenile polyp on pathologic examination. Both a detailed patient history and a digital rectal examination might be necessary to evaluate the cause of unexplained abdominal pain and difficulty defecating in children and young people.

Key words: Abdominal pain; digital rectal examination; juvenile polyp; rectal tumor.

ÖZET

Juvenil polipin en sık görülen klinik bulgusu ağrısız rektal kanamadır. Bu yazıda, rektal kanama olmaksızın dışkılama zorluğu olan ve açıklanamayan karın ağrısı yakınmasıyla başvuran 12 yaşındaki erkek bir olgu sunuldu. Rektal muayenede eksternal hemoroid, anal fissür veya başka bir anal hastalık saptanmadı. Ancak, anal kanaldan yaklaşık 5 cm ileride saplı bir kitle saptandı. Rektal inceleme sırasında aniden anüsten dışarı çıkan kitleye patolojik incelemede hamartomatöz polip tanısı kondu. Nedeni açıklanamayan karın ağrısı ve dışkılama zorluğu olan çocuk ve gençlerde dikkatli bir öykü alma ve rektal muayene gereklidir.

Anahtar sözcükler: Karın ağrısı; parmakla rektal muayene; juvenil polip; rektum tümörü.

Introduction

Juvenile polyps are known to occur in children and young people. The most common type of polyp is the isolated juvenile polyp, usually occurring on the left side.^[1] The most frequent clinical presentation is painless rectal bleeding.^[2]

We report a case of a rectal polyp in a 12-year-old boy who presented with unexplained abdominal pain and no rectal bleeding.

Case Report

A 12-year-old Asian boy traveling from a foreign country presented to the Emergency Department (ED) with a sixday history of abdominal pain and difficulty defecating. He had experienced no previous medical problems. According to his mother, the patient had been evaluated with plain radiography and ultrasonography except a rectal and colonoscopic examination before presenting to our ED and was diagnosed with constipation.

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Figure 1. Pedunculated polyp with long stalk was found in about 5 cm above anal verge. The mass was grossly an oval, lobulated, and pedunculated polyp, measuring 25x18x13 mm. The cut surfaces revealed multiple mucin-containing cysts, ranging 1 mm to 3 mm.

In our ED, the patient did not complain of any symptoms of rectal bleeding. For six days, he had had difficulty defecating and abdominal pain without febrile sense. None of his family members had inflammatory bowel diseases, multiple polyposis, or malignant diseases of the gastrointestinal tract.

On physical examination, he had mild tenderness at a focal point in his lower abdomen. A digital rectal examination showed no external hemorrhoid, anal fissure or other anal disease. However, a mass with stalk was detected about 5 cm above the anal verge. The mass suddenly exited the anus during the rectal examination. The mass was an oval-shaped, lobulated, and pedunculated polyp, measuring 25x18x13 mm (Fig. 1). The external surface was smooth, diffusely hyperemic, red, granular, and largely eroded. An emergency trans-anal polypectomy was performed on the patient.

Pathologic analysis was performed on the specimen. On hemisection, the cut surfaces revealed multiple mucin-containing cysts, ranging from 1 mm to 3 mm in size (Fig. 1). After bisection, one half was embedded for both the frozen and the permanent section biopsies. The remaining half was embedded in fixative (10% neutral buffered formalin solution) and reserved for further pathologic examination. Our pathologist confirmed the diagnosis of hamartomatous juvenile polyp.

On pathologic examination, the polyp was determined to be a pedunculated juvenile polyp with some mucin-filled, often cystically dilated, glands lined by colorectal-type and columnar epithelial cells with no remarkable nuclear atypia. It contained abundant, edematous, and inflamed stroma with exuberant granulation tissues.

We recommended further colonoscopic examination for detecting possible additional polyps and a genetic consultation in the patient's home country.

Discussion

Abdominal pain is a common complaint of children seeking medical care in the pediatric ED. Acute abdominal pain in children 3 to 15 years old includes a wide range of diagnoses. Common causes of abdominal pain in this age group include appendicitis, constipation, and pain secondary to nonspecific viral syndrome, acute gastroenteritis, strep pharyngitis, UTI, or pneumonia.^[3]

Juvenile polyps are generally not considered as a possible diagnosis for abdominal pain in the ED unless the most common symptoms are present, including painless rectal bleeding, a prolapsing rectal mass, and mucopurulent stools. In this case, the patient complained of unexplained abdominal pain and difficulty defecating but not of rectal bleeding. In his country, the patient was diagnosed with constipation without a rectal examination. Although a rectal examination may provide minimal information, it is always recommended for pediatric patients with constipation to assess the presence of stool and/or a mass, rectal tone, sensation, and the size of the anal vault.^[4]

Thus, it might be necessary to record a detailed medical his-

tory and perform a digital rectal examination to evaluate the cause of unexplained abdominal pain and difficulty defecating in children and young people.

Conflict of Interest

The author declare no conflict of interest related to this work.

References

1. Corredor J, Wambach J, Barnard J. Gastrointestinal polyps in children: advances in molecular genetics, diagnosis, and

management. J Pediatr 2001;138:621-8.

- 2. Durno CA. Colonic polyps in children and adolescents. Can J Gastroenterol 2007;21:233-9.
- Kharbanda BA, Sawaya RD. Acute abdomen in children. In: Tintinalli JE, Kelen GD, Stapczynski JS, MA OJ, Clin DM, Cydulka RK, editors. Emergency medicine: a comprehensive study guide. 7th ed. New York: McGraw-Hill; 2010. p. 840-1.
- North American Society for Pediatric Gastroenterology, Hepatology and Nutrition. Evaluation and treatment of constipation in children: summary of updated recommendations of the North American Society for Pediatric Gastroenterology, Hepatology and Nutrition. J Pediatr Gastroenterol Nutr 2006;43:405-7.