

Prolapsed Juvenile Polyp of the Anus in 2 Cases

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Abstract

Introduction: Rectal polyps are well-circumscribed, sessile or pedunculated formations that develop on the digestive mucosa. Juvenile polyps are seen in 4% - 12% of cases during pediatric colonoscopies. In children, rectal bleeding is a frequent warning sign, often a recurrent bleed with no impact on general condition. Diagnosis is based on clinical, imaging and digestive investigations, but anatomopathological examination remains the only means of confirmation. There are a number of treatment options, ranging from abstention to surgical excision. We report two (2) cases of isolated hemorrhagic juvenile polyp prolapsed to the anus in order to analyze the diagnostic and therapeutic features of this pathology. **Patients and observations:** A 7-year-old female patient presented to the pediatric emergency department of the Donka National Hospital with a hemorrhagic anal mass. On clinical examination, the patient was found to be in satisfactory general condition, with a hemorrhagic pedicle mass prolapsed to the anus. The mass was removed under general anesthesia. Postoperative management was straightforward. **Conclusion:** Juvenile polyps are the most common proctological condition in this age group. Clinical examination must be meticulous, as certain signs may point to a particular pathology. Colonoscopy is the diagnostic test of choice, and can also be used as a therapeutic tool.

Keywords

Polyp, Juvenile, Prolapse, Child

1. Introduction

A polyp is a well-circumscribed, sessile or pedunculated growth or formation

that develops on the digestive mucosa of the body's natural cavities (stomach, small bowel, colon, rectum, etc.) [1]. Digestive polyps are common in children. They are observed in 4 to 12% of cases during pediatric colonoscopies. This lesion is particularly common in boys aged around 5 years. Its etiopathogenesis remains unknown, and it has long been considered a reactionary lesion or pseudo tumor [2], usually discovered incidentally during digestive endoscopy or laparotomy. When symptomatic, clinical signs depend on the size and location of the lesion. The main symptoms are rectal discharge and abdominal pain. Diagnosis is based on clinical, imaging and digestive investigations, but pathological examination is the only means of confirmation. The majority of juvenile polyps are located in the recto sigmoid [3]. There are a number of treatment options, ranging from abstention to surgical excision. Usually, in the case of isolated prolapse of the juvenile polyp, the prognosis is good, so there is no need for endoscopic surveillance [4].

We report two (2) cases of isolated hemorrhagic juvenile polyp prolapsed to the anus in order to analyze the diagnostic and therapeutic peculiarities of this pathology.

2. Observation

Observation N°1

CN, 7, female with no pathological history, consulted for rectal prolapse and abdominal pain that had been present for several days. Clinically, she was in good general condition, with a painless abdomen of normal soft volume.

On rectal examination, the anal margin was bloodstained, with the presence of an oblong, reddish, lemon-sized mass prolapsed through the anus (**Figure 1**).

Rectoscopy revealed a large, hemorrhagic, pedunculated polyp in the rectum (**Figure 2**).

Under general anaesthesia in the gynaecological position, we excised this pedunculated mass, approximately 3 cm in diameter. The specimen was sent to anatomopathology, which concluded that it was a tubulo-caval polyadenoma.

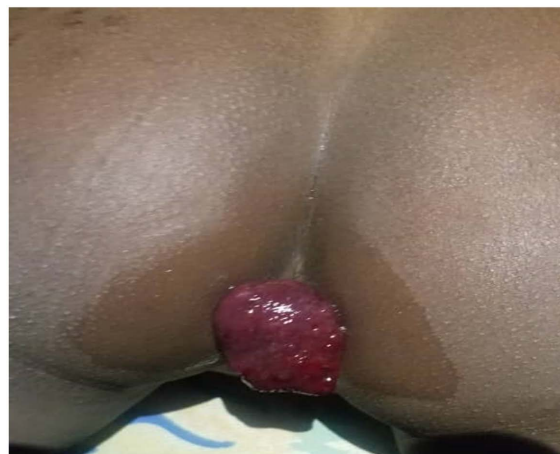


Figure 1. Anal prolapse of juvenile polyp.

The post-operative course was straightforward, and the patient was discharged home after six (6) hours' observation. A check-up was carried out at 6 months, with no particularities noted.

Observation N°2

BA, 7 years old, female, with no pathological antecedents, received at the paediatric surgical emergency department for rectorrhagia from a mass through the anus that had been evolving for five (5) hours.

The onset of symptomatology would date back to 5 hours ago, with the onset of bleeding and the emergence of a mass through the anus during defecation, prompting consultation for management.

On clinical examination, she was in good general condition, the abdomen was normal in size, supple and painless.

Examination of the anal margin revealed a pedunculated mass measuring approximately 4 cm, prolapsed through the anus and bleeding on contact (**Figure 3**).

She was taken to the operating theatre the same day under general anaesthetic in the gynaecological position, exploration revealed a pedunculated mass appended to the rectum, the mass was excised and the specimen deposited in the

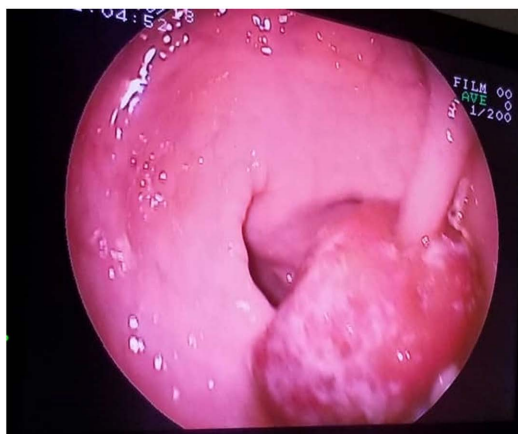


Figure 2. Endoscopic image of a polyp pedunculated in the rectum.



Figure 3. Anal prolapse of juvenile polyp.

anatomopathology laboratory, which concluded that it was a juvenile hamartomatous polyp.

The post-operative course was straightforward, and the patient was discharged after four (4) hours' observations.

After six (6) months, he underwent a consultation which revealed no particularities.

3. Discussion

Digestive polyps are tissue formations that develop in the intestinal lumen [5] [6]. They are the most common proctological condition in this age group. They are common in children, and are observed in 4% - 12% of cases during paediatric colonoscopies [2]. These lesions are particularly common in boys aged around 5 years [5], whereas the patients in our study were girls aged 7 years respectively.

In an American study of 810 children with at least one polyp, patients of Hispanic or African origin were significantly more represented [2].

In pediatrics, their discovery is not uncommon, identified by two (2) situations, one urgent in relation to a symptomatological repercussion requiring an emergency procedure, and another requiring cold exploration [6]. Our patients were presented with an emergency situation characterized by rectorrhagia.

The etiopathogenesis of juvenile polyps is unknown, and has long been considered a reactionary or pseudotumoral lesion. However, in 2008, the nature the neoplastic nature of this lesion has become evident with the detection of the PDGFR alpha mutation in the tumour cell genome [6].

The clinical investigation must be thorough, with detailed questioning in particular looking for consanguinity, a family history of polyps or colon cancer.

A polyp is usually discovered incidentally during digestive endoscopy or laparotomy. When symptomatic, clinical signs depend on the size and location of the lesion [6] [7] [8].

The usual site of the polyp is the left colon, with a predominance in the recto-sigmoid zone of around 63% - 84% [9]. They measure 1 - 3 cm in length and are pedunculated in 90% of cases.

Clinical manifestations are variable and non-specific. In children, rectal bleeding is a frequent warning sign, often a recurrent bleed with no effect on general condition. They may also include isolated or recurrent abdominal pain, IIA or intestinal obstruction, often related to the localization [6] [10].

Sometimes, as in our case, the polyp is delivered during an effort to defecate. In a Chinese study of 487 children, the symptoms associated with the presence of a polyp were dominated by rectal discharge (94%), rarely responsible for anaemia (7%) and frequently isolated. Other symptoms such as abdominal pain, prolapse of the polyp through the anus or diarrhoea were observed in only 9%, 9% and 2% of cases respectively, and the rectal examination revealed the lesion in 21% of cases [3]. In our case, the patients consulted for rectal discharge. Clin-

ical examination must be meticulous, as certain signs may point to a particular pathology (lentiginosis as part of Peutz Jehger syndrome).

Radiologically, contrast enema is still of great interest, given its availability and accessibility [3] [6] [11].

At present, more precise and increasingly accessible examinations are tending to replace it, such as entero scan or, better still, entero MRI [10].

New techniques, such as endoscopic videocapsule (VCE) or balloon-assisted enteroscopy (EAB), are also in vogue.

Endoscopy is the diagnostic examination of choice, as it can assess the homogeneous nature of the mass (smooth or irregular, haemorrhagic or not, pedunculated or sessile, uni-lobed or polylobed), as well as providing a therapeutic weapon, enabling biopsy for anatomopathological study or endoscopic excision with few complications [8] [9].

Ultrasound can visualize polyps in doubtful cases. In the Chinese study, 98% of colonic polyps were detected by ultrasound in 352 children [3].

Colonic preparation must be of good quality to facilitate visualization of lesions and avoid the explosion of gas produced by flora.

Diagnosis is based on clinical, imaging and digestive investigations, but anatomopathological examination remains the only means of confirmation.

There are a number of treatment options, ranging from abstention to surgical excision. When endoscopic treatment fails, surgical resection may be considered to control complications such as haemorrhage [3] [12].

The histological study of a polypoid lesion most often requires the study of the endoscopically or surgically resected specimen. Lesions are variable, ranging from a simple benign juvenile polyp to adenocarcinoma, although the latter remains exceptional in children [13].

Complications are rare, with 2 perforations and one bleed among the 487 polypectomies in the Chinese paediatric series [3]. In our observation, we did not note any particularities.

It is generally accepted that the prognosis of patients undergoing polypectomy for isolated juvenile polyps requires no special follow-up [14].

4. Conclusion

Juvenile polyps are the most common proctological disorder in this age group. It presents as a purplish, easily hemorrhagic mass, sometimes perceptible on rectal examination. Clinical examination must be meticulous, as certain signs may point to a particular pathology. Complete colonoscopy is the diagnostic examination of choice, and can also be a therapeutic weapon, enabling endoscopic excision with few complications.

Conflicts of Interest

The authors declare no conflicts of interest regarding the publication of this paper.

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