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Rectal Prolapse of the Child at the Center University Hospital of Brazzaville

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Abstract

Summary: The aim of this work was to determine the frequency of rectal prolapse and to describe the therapeutic aspects. **Material and Methods:** A descriptive study with a retrospective collection was carried out between January 2013 and May 2016 in 29 months in the pediatric surgery department at the Center University Hospital of Brazzaville. Children between the ages of 1 and 15 years of age, treated for rectal prolapse and whose records were exploitable were included. The variables studied were: age, gender, parental socio-economic status, consultation time, preference factors, pre-admission treatment, treatment initiated and progression. **Results:** In 29 months, 22 cases of rectal prolapse were collected, *i.e.* a hospital frequency of 0.96%. The mean age was 4.5 years extremes (1 and 11 years). The average time of consultation was 5 days extremes (1 and 21 days). Diarrhea 5 cases (23%), constipation diarrhea 3 cases (14%), constipation 10 cases (45%), bronchopneumopathy 4 cases (18%). The treatment was surgical according to the Thiersch technique in all cases. The evolution was favorable. **Conclusion:** Rectal prolapse, a benign pathology, is relatively uncommon. Constipation remains the main factor favoring the need to take care of upstream. Treatment by the Thiersch method remains the first choice in children.

Keywords

Rectal Prolapse, Frequency, Children

1. Introduction

The rectal prolapse, protrusion of all layers of the rectum through the anus is a very disabling pathology. Its incidence varies between 0.25% and 0.45% [1]. Its

diagnosis is easy, often made by the parents as a sort of red mucous membrane in ferrule during defecation. It's well codified treatment relies essentially on strapping, a simple, inexpensive, radical, fast and reliable method. The evolution is favorable.

The aim of this first work was to determine the frequency of the rectal prolapse in children and to describe the therapeutic aspects at the Center University Hospital of Brazzaville.

2. Material and Methods

We carried out a descriptive study with a retrospective collection between January 2013 and May 2016 in 29 months in the pediatric surgery department at the Center University Hospital of Brazzaville. Children aged 0 to 15 years treated for the rectal prolapse and whose records were exploitable were included. Records of children treated for prolapse intussusception were not included.

Our data sources were medical records and operational records. The variables analyzed were: frequency, age, gender, parental socio-economic status, time to consultation, preference factors, pre-consultation treatment, hospital treatment, and outcome.

Treatment consisted in all cases of dietary advice, administration of transit regulator followed by anal strapping. The method used to perform the strapping was that of Thiersch which is done in the operating room, under general anesthesia with a mask. With the patient in supine position, a number 2 absorbable yarn is passed under the skin around the anal margin and tightened on the anal canal calibrated by the finger to reduce the diameter of the anal orifice.

3. Results

During the study period, of 2276 children admitted to the service, 22 were admitted for the rectal prolapse, a frequency of 0.96%. There were 9 boys and 13 girls (sex ratio: 0.69). The mean age was 4.5 years extreme (1 and 11 years). The distribution by age group is shown in **Table 1**. Parents had a low socioeconomic level in all cases. The average time of consultation was 5 days extremes (1 and 21 days). The reason for consultation was in all cases, an external, intermittent, permanent rectal mucosa (**Figure 1**). Diarrhea 5 cases (23%), diarrhea alternating constipation 3 cases (14%), constipation 10 cases (45%), and chronic cough 4 cases (18%). Prior to the consultation, children were treated with n = 12 plants

Table 1. Patient distribution by age range.

Age	N	Percentage (%)
Less 2 years	2	9
Between 2 - 5 years	17	77
Greater 5 years	3	14
Total	22	100

Figure 1. Rectal prolapsed.

(54.5%), free laxatives obtained n = 6 (27.3%), and children received no treatment n = 4 (18.2%). We performed surgical treatment in all cases. Evolution was favorable in all cases, no recurrence was noted.

4. Discussion

The rectal prolapse is a relatively infrequent disease [1]. Its hospital frequency varies according to the series; it is 43 cases per year according to Ahmed [2], 5 cases per year according to Koivusalo *et al.* [3] and 11 cases per year in ours. The rectal prolapse is a benign condition that affects both boys and girls of all ages [2] [4]. The average age of occurrence noted in our study (4.5 years) is similar to that found in Togo *et al.* [5] in Mali (4.3 years).

The late consultation, known in Africa was found in our work. Population ignorance, poverty, socio-cultural factors and dysfunctional health structures would explain this delay. The rectal prolapse in children, especially infants and young children is favored by dietary and hygienic factors [6]. In our study, as in most literature series, constipation is the main factor [3] [4] [5] [7]. Chronic diarrhea, dysentery and malnutrition are factors associated with the development of the rectal prolapse in children, especially in developing countries [7]. However, the child's prolapse may be idiopathic [4] [8], as reported by Koivusal and Shah studies in 19% and 31% of cases [3] [7]. The occurrence of prolapse in the course of bronchopulmonary disorders in this series may be explained by intra-abdominal hyperpressure during coughing.

Therapeutically, 81.8% of the patients use self-medication because of low purchasing power, in the absence of a social protection system, all health expenditure (consultation, complementary examinations, pharmaceuticals) being to the parents.

Treatment of the rectal prolapse requires prior medical care obeying the hygiene-dietetic rules that must be explained to parents [6] [8]. For Togo *et al.* [5] in Mali, medical treatment was done in 90% of cases. On the other hand Dieth *et*

al. [9] in Cote d'Ivoire, used sclerosing injections in 100%. The techniques of rectopexy of Orr-Loygue or resection of the proliferated pudding [10] are excessive given the benignity of the affection. Lochart Murmmery's method was used in the study of Togo *et al.* [5]. The method of Aboulola *et al.* [11], which involves introducing a large rectal probe fitted into the suture for 8 days, through the reduced prolapse, is a source of numerous recurrences.

In our study, the therapeutic protocol consisted of dietary hygiene measures followed by intervention by the Thiersch technique. This technique (strapping) is fast and simple to achieve with a success rate of 100%.

5. Conclusion

Rectal prolapse remains a benign pathology, uncommon in pediatric proctology practice. Children aged 2 to 5 years are the most affected and constipation remains the main factor favoring. The treatment of choice is the method of Thiersch, because it is easy to perform, non-aggressive, effective and uncomplicated.

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