# Surgical Research

# Anal Fistula in Children: A Case Report from The Donka Chu National Hospital in Conakry

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### ABSTRACT

**Introduction:** anal fistula (AF) is a common anorectal disorder, with an estimated incidence of 0.5% to 4.3% in daily practice in infants. Most cases occur in children under one year of age, with a strong male predominance. Anal fistula during these periods is probably congenital in origin. The aim of our study was to discuss a case of crypto-glandular anal fistula in children.

**Case Report:** 4-year-old patient admitted with a purulent perianal discharge of congenital origin. He had no previous history of the condition and was the second oldest of three siblings. General examination showed a lucid patient with a good physical appearance and good colouration of the integuments and conjunctivae. Pulse = 90/min; FR=26/min; the abdomen was symmetrical and supple with no hepatosplenomegaly. Examination of the perineum showed a cutaneous orifice in the form of a granuloma of left lateral topography. The cryptic orifice was visible with the finger prick (Good Sall). Biological tests were unremarkable. We performed a fistulectomy (Figures 2 and 3); the specimen sent to the pathology department showed a fleshy bud on the fistulous pathway.

**Conclusion:** Crypto-glandular anal fistula in children is a common condition. It is diagnosed clinically, and surgical treatment remains appropriate in our context despite the lack of consensus.

#### Keywords

Crypt anal fistula, Child.

#### Introduction

The peri-anal fistula is a tract that connects the peri-anal skin to the anal canal. The path of the fistula is formed by an abscess resulting from an obstruction of an anal gland. This obstruction leads to chronic infections and epithelialisation of the abscess drainage routes [1,2]. Anal fistula is one of the most common diseases of the anus, and although the exact incidence is difficult to determine, rates of 2 per 10,000 people have been reported [3,4]. In children,

anal fistula is generally treated in the same way as in adults. The ideal goal of treatment is to eliminate the anal fistula, while minimising damage to the anal sphincter and preventing anal incontinence. Surgery has been the mainstay of treatment [5,6]. The aim of our study was to discuss a case of crypto-glandular anal fistula in a child.

#### **Case Report**

A 4-year-old patient admitted to the department with a congenitally progressive purulent perianal discharge. He had no particular personal or family history and was the second sibling

of three. General examination showed a lucid patient with a good physical appearance and good colouration of the integuments and conjunctivae. Pulse = 90/min; FR=26/min; the abdomen was symmetrical and supple with no hepatosplenomegaly. Examination of the perineum revealed a cutaneous orifice approximately 0.5 cm in diameter, with an indurated and inflamed edge located 1 cm from the anal margin (decubitus, anus, and anus). which, when pressed with the finger, produces a purulent liquid. The cryptic orifice could be seen with the fingernail in the form of a buttonhole opposite the cutaneous orifice (Good Sall). Biological tests were unremarkable.

We performed a fistulectomy (Figures 2 and 3), and the specimen was sent to the pathology department, where it showed a fleshy bud on the fistulous path.



**Figure 1:** Clinical examination of the patient in left lateral decubitus position. Showing the cutaneous orifice of the anal fistula.



Figure 2: External orifice in the form of a granuloma of lateral left topography.



Figure 3: Wound appearance after healing the wound.

#### Discussion

Cryptogenetic anal fistula is a common proctological disease, accounting for up to 71% of suppurations in the region. In contrast to the adult population, the disease affects almost exclusively boys and is virtually non-existent in girls; it is rarely associated with sepsis and may also resolve spontaneously [7,8].

Anal fistula arises from infection of a Hermann et Desfosses gland located on the pectineal line in the hollow of a crypt. The glandular canal terminates in the crypts, but the body of the gland passes through the internal sphincter, the complex longitudinal layer and sometimes even the external sphincter. There are 6 to 8 of these glands, more numerous in the posterior part of the anal canal. In children, it is thought to be due to congenital anomalies of these glands [7]. Our case involved a 4-year-old boy with a congenital anal fistula.

Anal fistula is the chronic form and natural evolution of an abscess. It is most often manifested by a purulent anal discharge that may be accompanied by pain, pruritus or anal discomfort. A proctological examination will reveal an external orifice, which will look like a granuloma, most often on the left side, through which a fine stylet can be passed to diagnose the condition and determine the height of the fistula. The internal orifice is rarely reached without general anaesthesia [7,8]. Purulent anal discharge was the only symptom found in our case. The external os presented as a granuloma with a left lateral topography, as reported in most series. The most frequently used classification is that of Parks, which distinguishes 4 types of tract [9]. Type 1 is an inter-sphincter fistula; Type 2, a transphincter fistula; Type 3, a supra-sphincter fistula; and Type 4, an extra-sphincter fistula. Our case was a Parks type 2 transphincteric fistula. Although the diagnosis of anal fistula remains clinical, with a 93% rate of identification of the internal orifice by rectal examination if the operator is trained [10], the 2 para-clinical examinations useful for diagnosis are endoanal ultrasound and MRI of the anal canal and pelvis. Bacteriological samples are taken in the case of atypical fistulas to rule out an infectious origin. (tuberculosis, actinomycosis or gonococcal disease, etc.). Endoanal ultrasound has a diagnostic accuracy of 91% to 95% in terms of path height, but is less accurate in detecting the internal os; as for MRI, its diagnostic accuracy varies between 64% and 96% depending on the study [7,10]. In our case, the diagnosis was clinical; para-clinical diagnostic methods were not available.

Recommendations for the management of anal fistula in children are inconsistent and differ from those for adults. Various approaches have been proposed for their management, but the lack of consensus makes the choice of treatment difficult [8,11]. While some authors favour surgery as the main option, others support conservative therapy with sitz baths with or without antibiotics [12].

Conventional procedures for the surgical treatment of anal fistulas include fistulotomy, fistulectomy, septal cutting and the mucosal advancement flap, which have been shown to have a therapeutic success rate of up to 90%. Of particular note is the anal fistula plug technique, which is revolutionising conventional procedures [2,3]. Conventional treatment is effective in almost 100% of cases in the following teams. Specialised. We opted for surgical treatment in our case (fistulotomy), and the post-operative course was simple, with healing per primum.

## Conclusion

Crypto-glandular anal fistula in children is a frequent pathology. It is diagnosed clinically, and surgical treatment is still appropriate in our context despite the lack of consensus. Post-operative management is simple in most cases if the treatment is carried out correctly.

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