

Pathologies of the Peritoneo-Vaginal Canal in Children in General Surgery at the Reference Health Center of Community IV of Bamako Mali

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Abstract

Original Research Article

Introduction: Peritoneal-vaginal canal (PVC) pathologies are very common in infants. They are not uncommon in newborns, especially in cases of prematurity. The clinical diagnosis of an inguinal hernia is made when an inguinal or inguinoscrotal swelling appears during crying or pushing efforts. **Methodology:** We carried out a prospective and descriptive study in the general surgery department of the Reference Health Center (CSREF) of Commune IV of Bamako (Mali), over the period of 2 years from January 1, 2016 to December 31, 2018 and it involved 43 patients. This allowed us to collect information directly at the patient's bedside and to participate in the care ourselves. **Results:** From January 1, 2016 to December 31, 2018, in 2 years 1208 patients were consulted; with 805 operated on including 43 cases of CPV pathologies, i.e. 3.55% of hospital frequencies and 5.34% of surgical interventions. Middle age of patients was 3.48 ± 2.67 years. The pathology was discovered during linen changes in 55.8%. Intermittent inguinal swelling was the majority reason for consultation, 76.7% of cases. PCPV was asymptomatic in 39 patients. Simple inguinal hernia was the diagnosis retained in 76.74% of cases. All patients were operated on using the Pott method. **Conclusion:** Pathologies of the peritoneovaginal canal represented a hospital frequency of 3.55% in our study. Hernia is the most represented of CPV pathologies followed by hydrocele. The Pott technique was performed in all our patients. The evolution was simple in 97.67% of cases.

Keywords: Pathology; peritoneal-vaginal canal, child.

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INTRODUCTION

Pathologies of the peritoneo-vaginal canal constitute a set of pathologies encountered in children and resulting from the abnormal persistence of the peritoneo-vaginal canal [1-3].

They constitute the most common pathology in infants [4]. In pathologies of the peritoneo-vaginal canal, the clinical diagnosis of an inguinal hernia is made when an inguinal or inguinoscrotal swelling appears during crying or pushing efforts.

The treatment is essentially surgical but the indication for surgery depends on the age of the patient, the nature of the pathology and the occurrence of complications.

We carried out a cross-sectional study. This allowed us to collect information directly at the patient's bedside and to participate in patient care ourselves. It lasted 2 years and involved 43 patients.

METHODOLOGY

This work was carried out in the General Surgery Department of the District Hospital of Commune IV of Bamako (Mali).

This was a prospective study which took place over the 2-year period from January 1, 2016 to December 31, 2018.

We carried out a systematic recruitment of all children with CPV pathology. Any pathology other than that of CPV was not part of this study.

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- Children with CPV pathology operated on in other departments but followed in the department during the study period
- CPV pathologies in adults

The statistical analysis was carried out using Epi-Info Version 6.02 fr and SPSS software. The comparison tests used were Chi² and Chi² corrected by Yates and Fisher with a significance level of 5%.

RESULTS

Table I: Distribution of patients according to age

Ages	Effective	Percentage
Less than a month	09	20,93
1 month – 2.5 years	09	20,93
3 years - 6 years	17	39,54
7 years – 15 years	08	18,6
Total	43	100

The average age of the patients was 3.48±2.67 years with extremes of 1 day and 15 years.

2-2 Sex:

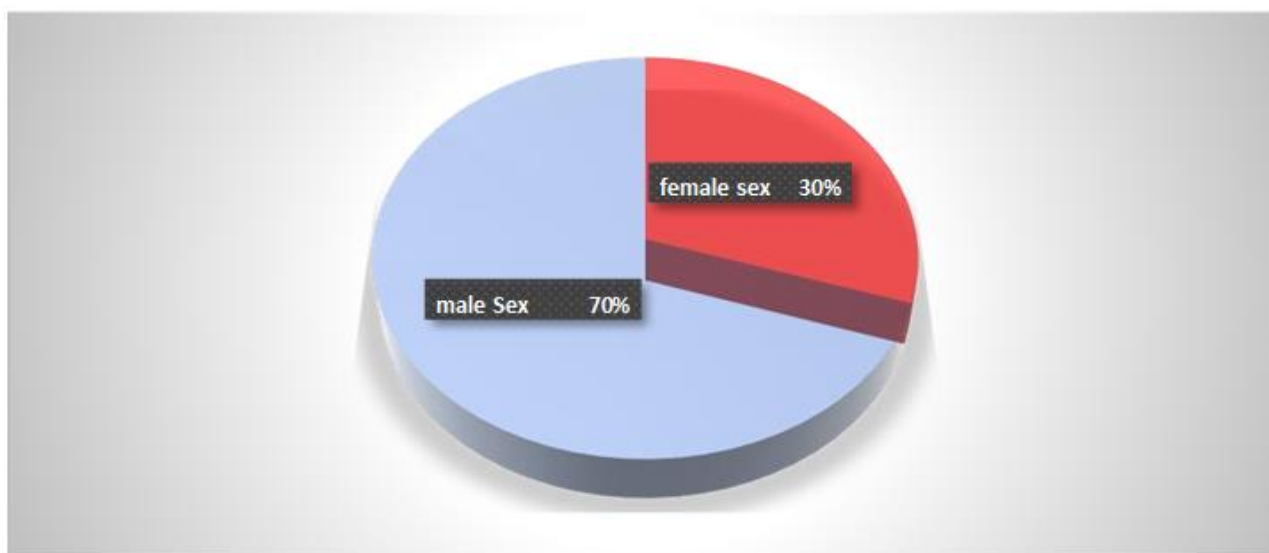


Figure 1: Distribution of patients by gender. Ratio of 3.77

Table II: Distribution of patients according to reason for consultation

Reason for consultation	Effective	Percentage
Scrotal swelling	08	18,6
Inguinoscrotal swelling	02	04,7
Inguinal swelling Intermittent	33	76,7
Total	43	100

Intermittent inguinal swelling was the majority reason for consultation, i.e. 76.7% of cases

Table III: Distribution of patients according to associated signs

Associated signs	Effective	Percentage
Asymptomatic	39	90,7
Refusal of food	01	02,3
Crying and restlessness	02	04,7
Cough	01	02,3
Swellings	43	100

PCPV was asymptomatic in 39 patients.

Table IV: Distribution of patients according to diagnosis

Diagnosis	Effective	Percentage
Simple inguinal hernia	33	76,74
Strangulated inguinal hernia	01	02,33
Inguino-scrotal hernia	01	02,33
Hydrocele	08	18,6
Total	43	100

Simple inguinal hernia was the diagnosis retained in 76.74% of cases 4- Surgical treatment: All patients were operated on using the Pott method.

DISCUSSION

CPV pathologies are very common in infants. They are not uncommon in newborns, especially in cases of prematurity.

The discovery of these congenital pathologies at this age can be explained by their benign and rarely symptomatic nature, as Dans notre étude nous avons trouvé que l'âge moyen était de 3,48+/- 2,67 avec 3 ans-6 ans comme la tranche la plus représentée.

The average age of O. Ndour et Al's patients was 5.7 years (± 2) with extremes of 17 days and 15 years. In their study, cryptorchidism was the third most common congenital anomaly of the inguinal canal after hernias and hydroceles [5].

The average age in the work of A. Sarr and All was 7.5 ± 7 years with extremes of 2 months and 39 years [6]. In Senegal N'DIAYE M and AL found 5.3/- 4.4 years [7].

The average age of our patients, which is slightly low, is explained by the fact that our department is adjacent to a pediatric department which refers all surgical cases to us.

Intermittent inguinal swelling was the majority reason for consultation, i.e. 76.7% of cases.

This result is very similar among certain authors such as A. Sarr and colleagues who found as a reason for consultation inguinal or inguino-scrotal swelling, painless and intermittent in 72.3% of cases and a large painless bursa in 27.7% of cases. The mode of installation in these patients was progressive in 45 patients (27.6%) while for the other patients the symptomatology evolved since birth [6].

According to SEWA EV *et al.*, the reason for consultation was parental concern about the increase in the volume of purses in 80% of cases [8].

The average age of our patients was 5.3 ± 4.4 years. The most represented age group was 0-4 years old. The sex ratio was 98 and the persistence of the NUCK channel represented 1% (n=2) of the patients.

CPV pathologies occur more frequently in boys than in girls probably because of the role played by testicular migration in this pathology which does not exist in girls [9].

NGOM G, MOHAMED AS, SALECK AE, MBAYE PA. The uncomplicated pathology of peritoneal-vaginal canal in Dakar: about 125 cases. *J Ped and child care.* 2015; 28:114-7] They respectively recorded a ratio of 28 and 40.6 higher than that of our series. This could be explained by recruitment bias.

Ligation of the peritoneal-vaginal canal via the inguinal route was done in all patients. Treatment of HO, white line hernia or associated cryptorchidism was carried out during the same surgical procedure.

According to some authors, hernias strangulated or engorged by PCPV were treated urgently by ligation of the canal without loop resection in the absence of intestinal necrosis [11].

All patients were operated on using the Pott method. Sewa EV and colleagues, the treatment was surgical and consisted of closure of the peritoneo-vaginal canal in all cases. The inguinal approach had been the rule, associated or not with a scrototomy or median laparotomy depending on the case [8].

CONCLUSION

Pathologies of the peritoneal-vaginal canal represented a hospital frequency of 3.55% in our study. The Sarakolé ethnic group represented the majority of our study population.

Hernia is the most represented of CPV pathologies followed by hydrocele. The Pott technique was performed in all our patients. The evolution was simple in 97.67% of cases.

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