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Pediatric Surgery

Results of Laparoschisis Management in Mali Hospital

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Abstract **Original Research Article**

Laparoschisis is a congenital malformation characterized by externalization of the abdominal viscera trough a para-umbilical orifice. Its prevalence rose from 0.29 per 10,000 births in 1974 to 1.66 per 10,000 births in 1998. In Africa, very few studies have been devoted to this malformation. Its overall incidence is not known there but the studies carried out find a lower incidence compared to western countries. We conducted a retrospective, descriptive study which was conducted from May 1, 2018 to April 30, 2021, a period of three years, in the pediatric Surgery Unit of the Mali Hospital. The objective of this study is to report our difficulties in the management of this pathology. During our study we had collected 10 patients; the diagnoses were made in all cases post Nataly. Most of our patients i.e.90% was Lefort type I. All patients were seen within the first 24 hours and two patients died before surgery. We performed a one-stage closure in all our patients. Complications were marked by respiratory distress and hypothermia in all our patient. Mortality was 100%.

Keywords: Laparoschisis, Surgery.

INTRODUCTION

Laparoschisis is a congenital malformation which is characterized by exteriorization of the abdominal viscera through an office para umbilical. It is a sporadic malformation, most often isolated, association with chromosomal aberrations mainly affecting the young primiparae in disadvantaged socioeconomic backgrounds Fig 1 [1].

It is a relatively common malformation in Western countries. In fact, it went from 0.29 per 10, 000 births in 1974 to 1.66 per 10,000 births in 1998 [2]. In Africa, very few studies have been devoted to this malformation. Its overall incidence is not known there but the studies carried out find a lower incidence compared to Western countries [3-6]. Its diagnosis can be made prenatally or postnally. It's a neonatal surgical emergency Fig 2.

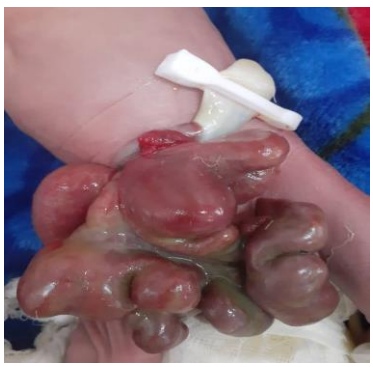

Figure 1: Laparoschisisbefore the operation

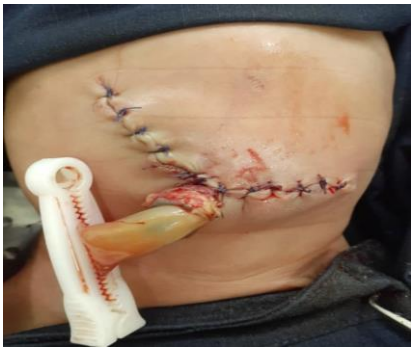

Figure 2: Laparoschis after the operation

Laparoschisis is a curable malformation; evolution without surgical or medico-surgical treatment is done inexorably towards death in a few days. The aim of this work was to determine the diagnostic and therapeutic difficulties in the management and review the literature.

MATERIALS AND METHOD

This is a retrospective, descriptive study which was conducted from May 1, 2018 to April 30, 2021, i.e. a period of three years, in the Pediatric surgery unit of the Mali Hospital. The objective of this study reported our difficulties in the management of this pathology. We included in the study, newborns from 1 to 28 days of age having been hospitalized in the neonatology department of the Mali hospital for laparoschisis.the parameters studied were. The circumstances of the diagnosis, pregnancy monitoring, the lefort classification, the delay of surgical management and evolution.

RESULTS

During our study we had collected 10 patients; the diagnoses were made in all cases post-natal. The male sex was the most represented 60% of our patients with a sex ratio of 1.5.the pregnancies were not correctly followed up in 60% of the cases because the ultrasound was not realized only in 30% of cases. Most of our patients, 90%, were lefort type I. All the patients were seen within the first 24 hours and two patients died before surgery. We performed a one-time closure at all of our patients. Complications were marked by respiratory distress and hypothermia in all our patients. The average duration hospitalization was 5 days with extremes of 1 and 10 days. Mortality was 100%.

DISCUSSIONS

Practitioners talk about it but few writings relate to it in any way. Specific on the management of laparoschisis.the objective of this work was to report the therapeutic difficulties of laparoschisis at the university Hospital of Mali. Indeed, the situation of this malformation is worring.our people certainly limited but is distinguished by particularities that it important to note .the antenatal diagnosis of laparodchidid is almost non-existent in our study, the diagnosis in all cases this state of affairs is explained by the lack of performance of our sonographers on the one hand and on the other hand by the fact that ultrasounds are carried out in most part by practitioners who are not specialists. In our study, the prenatal consultation was well conducted in only 2 out of 10 cases, i.e.20%, which is superimposable. To the African series [5, 7-9]. This lack of follow-up of the pregnancy could be explained by the lack of financial means and by the fact that some patients are still waiting for the pregnancy to be advanced to go to health facilities. The notion of consanguinity was found in 3 of our patients, i.e. 30% of cases. The Lefort classification was type 1 in most of our patients, i.e. 90% of cases. All our patients (8/10) benefited from radical surgical management with re-closure of the wall in one stage. They all died immediately postoperative in a picture of respiratory distress. This state of affairs is due to the lack of postoperative resuscitation because the pediatric or resuscitation service has no pediatric respirator or other devices for respiratory assistance after the intervention. Parenteral nutrition is expensive and therefore inaccessible too expensive for parents. These results corroborate with all the African series which are in the same situations as us and clearly different from Wester series which have all the means and an adequate technical platform for the management of this pathology.

Despite this precariousness in our care, we note a progression concerning the lifespan after the intervention which went from 1 day to 10 days. This is encouraging and amply demonstrates the improvement in operative technique and the need for proper respiratory support and parenteral nutrition for this pathology, hence our cry of alarm of the authorities of our country to enhance the technical platform of our hospital to deal with these kinds of pathologies.

CONCLUSION

Laparoschisis is a common pathology in pediatrics and is life-threatening. The diagnosis is post-natal in our practice context. The treatment is surgical. However, a caution Special attention should be given to post-operative follow-up to improve the technical platforms for pediatric resuscitation in countries with limited resources.

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