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## Management of Laparochisis with Atresia in Underdevelopment Country: Fousseyni Daou Hospital in Kayes (Mali): About a Case

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**Abstract Case Report** 

Gastrochisis is a herniation of the abdominal viscera through a full-thickness hole in the abdominal wall, usually located to the right of the umbilical cord insertion. It is estimated at 1/4000 to 1/10000 births, but there are significant geographical variations, with a high mortality rate in developing countries [1, 3, 4]. We report a case operated on at the Fousseyni Daou hospital in Kayes in 2019. This female child was born at home in septic conditions and was referred to us for care. The aim of this study was to determine the difficulties related to the management of laparochisis, especially with atresia, but also to describe the therapeutic and evolutionary aspects.

Keywords: laparochisis, atresia, difficulties.

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## Introduction

Laparochisis or gastrochisis designates a rare congenital malformation of the abdominal wall [2]. It is characterized by an incomplete closure of the abdominal wall, most often to the right of the navel (umbilicus). Through this opening, a large part of the intestine comes out of the abdominal cavity. Laparochisis is an isolated anomaly [5, 8], this characteristic makes it possible to distinguish it from malformation of the umbilical omphalocele.

During pregnancy, a good part of the intestine is bathed in amniotic fluid which can damage the intestine. In addition to pre-existing lesions, home births and precarious conditions in some health centers in low-income countries; other lesions can be grafted and threaten the vital prognosis of the child.

## **CLINICAL CASE**

Newborn of 1 day fig(1), had been referred to our structure for laparochisis. From an 18-year-old housewife mother, to a 33-year-old father (tailor). The mother had not done a prenatal consultation so no ultrasound had been performed. On clinical examination: it was a newborn female with a weight of 2 kg 800, the conjunctiva well colored (hemoglobin level 16 g / dl). The majority of the small intestine, the cecum and part of the ascending colon were exposed to the open air fig (1). From the tip of the ascending colon flowed meconium which stained all the exposed intestine apart from the abdomen; therefore colonic atresia was associated with gastric loss. Under general anesthesia, we proceeded to the enlargement of the abdominal cleft to the right of the umbilicus, a thorough examination of the entire loop and washing with saline solution. Then we performed a bypass colostomy fig (2). Oral feeding began 24 hours after the intervention because we had no parental nutrition or pediatric intensive care unit. The child presented with a surgical site infection which was circumscribed.

He then developed malnutrition, which was corrected in the malnourished care service. At 6 months we performed a colonic-terminal anastomosis fig (3), the end of which was found under the stomach. The postoperative course was simple with resumption of

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transit in 24 hours and the child began to suckle, because we do not have specific parental nutrition. At almost 2 years old, the physical examination of the child is normal fig(4), except that he presents with a delay in walking.



Fig-1: (atresia colon, small intestine)



Fig-2: Colostomy



Fig-3: Recovery



Fig-4: Healing at 2 years

Comment: Laparochisis is a malformation of the abdominal wall in which the intestine is found outside the abdomen [1, 3, 4, 8] Antenatal diagnosis is a major problem in our low-income countries and especially the illiteracy of our populations, who do not consider prenatal consultations too much. The malformation is visible on the prenatal examination from about the 18th week of pregnancy on the ultrasound examination. This is not the case of our patient whose mother had not undergone any prenatal consultation. The cause of this malformation is not known today [1, 6, 7]. The orifice appears very early in embryonic development. The abdominal organs of the child (intestinal, stomach) therefore come out through a gap close to the navel and are bathed in amniotic fluid. This leads to lesions of the intestine and especially this child was born at home which would aggravate the lesions of these organs. One of the difficulties, since at home what there is no means of effective protection to avoid or attenuate the lesions of these exposed organs. As for the therapeutic approach, children suffering from laparochisis are born at 37 weeks by caesarean section to avoid additional lesions that a vaginal delivery would cause, which is not the case in our developing countries. Our patient was born at home and was transported to our health facility about 30 km away in non-compliant conditions and had undergone a first intervention. Same-day intervention: stoma fg. After the stoma, the child begins to suckle 24 hours after the intervention because we do not have parenteral nutrition. Namely, according to the literature, intestinal functions resume weeks after the gastrointestinal correction [5, 6]. We had restored continuity 6 months after the birth of the child and started breastfeeding 24 hours after the intervention. The postoperative course was simple and the child was freed from hospitalization for 10 days. At almost 2 years old, the child presented well but with a delay in walking. Developed remains thorny because of the lack of intensive care services and parental nutrition.

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