

# Strangulated Umbilical Littre's Hernia In A Paediatric Patient: A Case Report

T Wade, P Ba, A Ngom, B Diop, M Diao, I Konaté

## Citation

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## Abstract

Littre's hernia is rare and often only discovered when complications arise. We report a case of strangulated umbilical Littre's hernia in a child. The patient was a 2-year old boy admitted for painful umbilical swelling. There was no fever. A surgical exploration found a strangulated Meckel's diverticulum. We proceeded with an ileum resection. The postoperative course was normal.

## INTRODUCTION

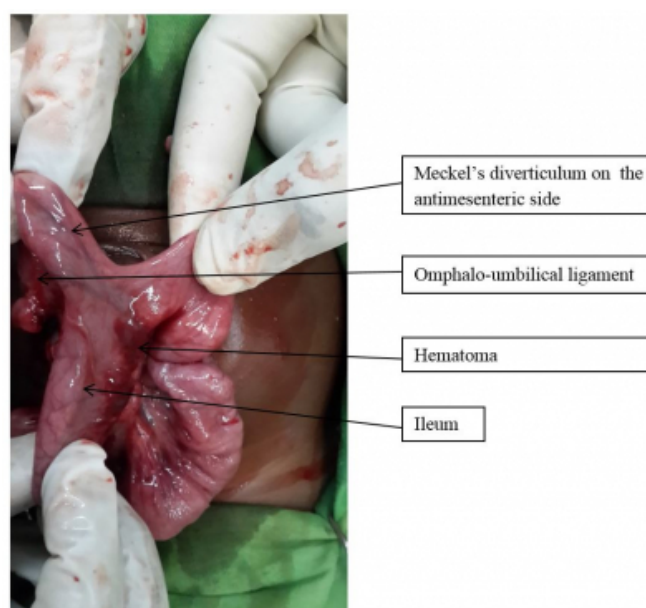
Meckel's diverticulum (MD) is the most common anomaly of the gastrointestinal tract. It occurs in 0,3 to 3% of the general population [1]. It is often discovered in surgery because of some complications. Any hernia containing MD is named Littre's hernia. Strangulated umbilical Littre's hernia is very rare. We report a case with this condition.

## CASE REPORT

A 2-year old boy was admitted to the Emergency Unit of the Regional Hospital of Thiès with a 10 hours history of painful umbilical swelling with vomiting. The Child did not have any episode of gastrointestinal bleeding or fever. Physical examination revealed an irreducible painful umbilical swelling. The laboratory tests were normal. No imaging examination was done. Under general anesthesia, the contents of the hernial sac were found to be a loop of ileum with a diverticulum on the antimesenteric side. There was no gangrenous tissue. There was also an adhesion between the diverticulum and the hernial sac and a hematoma on the mesenteric side (figure 1). A resection was performed to remove 10 cm of the small bowel on both sides of the MD followed by an immediate end-to-end anastomosis. The postoperative course was normal. The boy was discharged 7 days after the surgery in good clinic condition. On his 3 months follow-up he was well with no complaints. Histological study confirmed MD with heterotopic gastric mucosa without mucosal infarctions.

## Figure 1

Strangulated umbilical Littre's hernia



## DISCUSSION

The term Littre's hernia is used for any hernia containing MD. It was first described by Alexandre de Littre in 1700 [2]. MD is the persistent part of the omphalo-mesenteric duct. It is the most common anomaly of the gastrointestinal tract. It arises from the antimesenteric surface of the ileum and is located 10 to 100 cm from the ileocaecal valve [3]. Its incidence is about 0,3 to 3% in the general population with a small male preponderance [2]. Only 4 to 6% of MD will produce symptoms, more frequently during infancy [4]. The

principal symptom is rectal bleeding, sometimes massive, due to the presence of gastric mucosa [5]. The incidence of Littre's hernia is unknown. Only few cases are found in the literature. The most usual location of Littre's hernia are inguinal (50%), umbilical (20%) and femoral (20%) [4]. Strangulation is very rare. In children, the majority of strangulated Littre's hernia are located in umbilical hernias [4]. In our patient, the adhesion between the MD and the hernial sac prevented the MD from returning to the abdomen, thus causing the strangulation.

Littre's hernia is generally unsuspected. It is characterized by its latency. It is often discovered when complications arise, including strangulation. At this stage there are signs of small bowel obstruction. Fever and signs of inflammation occur later. Preoperative diagnosis of an incarcerated Littre's hernia with US or CT is extremely rare [5]. Surgery is the treatment of choice for MD. The most usual treatment of Littre's hernia is wedge resection of the MD [6]. Repair of the Littre's hernia consists of local diverticulum resection and herniorrhaphy. We proceeded to a total resection of the involved loop, 10 cm at each side of the MD and to an end-to-end anastomosis. This surgical approach is preferred when there are signs of intestinal suffering around the MD and if there are complications like inflammation, gangrenous

tissue or perforation [6, 7].

### **CONCLUSION**

Littre's hernia is rare. Umbilical location is more frequently found in children compared to adults. It is often discovered when complications arise. The treatment is surgical and consists of a wedge resection of the MD.

### **References**

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**Author Information**

**TMM Wade, MD**

Department of General Surgery of UFR Santé of Thiès University  
St Louis, Senegal  
mbarwade@hotmail.com

**PA Ba**

Department of General Surgery of UFR Santé of Thiès University  
St Louis, Senegal

**A Ngom**

Department of General Surgery of UFR Santé of Thiès University  
St Louis, Senegal

**B Diop**

Department of General Surgery of UFR Santé of Thiès University  
St Louis, Senegal

**ML Diao**

Department of General Surgery of Gaston Berger University  
St Louis, Senegal

**I Konaté**

Department of General Surgery of Gaston Berger University  
St Louis, Senegal