

# GSC Advanced Research and Reviews

eISSN: 2582-4597 CODEN (USA): GARRC2 Cross Ref DOI: 10.30574/gscarr Journal homepage: https://gsconlinepress.com/journals/gscarr/

(CASE REPORT)

Check for updates

# Peritonitis by traumatic ileal perforation by fishbone on inguinal hernia at the communal center of Ratoma

Diawara Mohamed Albert <sup>1,\*</sup>, Guirassy Mariama II <sup>2</sup>, Keita Doubany Mariame <sup>1</sup>, Camara Soriba Naby <sup>3</sup>, Diallo Mamadou Abdoulaye <sup>1</sup>, Bah Thierno Souleymane <sup>1</sup>, Fofana Houssein <sup>2</sup> and Touré Aboubacar <sup>2</sup>

<sup>1</sup> Department of Surgery, Communal Medical Centerl, Faculty of Science and Health Technic Gamal Abdel Nasser University of Conakry; Conakry Guinea.

<sup>2</sup> Department of General Surgery; Ignace Deen National Hospital, Faculty of Science and Health Technic Gamal Abdel Nasser University of Conakry; Conakry Guinea.

<sup>3</sup> Department of Visceral Surgery, Friendship Hospital Sino Guinean, Faculty of Science and Health Technic Gamal Abdel Nasser University of Conakry; Conakry Guinea.

GSC Advanced Research and Reviews, 2023, 16(01), 062-065

Publication history: Received on 10 May 2023; revised on 05 July 2023; accepted on 08 July 2023

Article DOI: https://doi.org/10.30574/gscarr.2023.16.1.0279

# Abstract

The aim of this study was to report an extremely rare case of peritonitis due to ileal perforation by poison bone.

Secondary peritonitis by traumatic ileal perforation is defined as inflammation of the peritoneal serosa following accidental opening of the wall of the ileal loop. We report a case of ileal perforation following the ingestion of the fishbone discovered intraoperatively during a left herniorrhaphy.

This rare case took place in the surgery department of the municipal hospital of ratoma

It related to a 37-year-old man admitted for left inguinal hernia, in whom we discovered an ileal perforation by fishbone during the cure of the hernia.

Fishbone peritonitis is rare and the diagnosis is made intraoperatively.

Keywords: Peritonitis; Ileal perforation; Foreign body; Inguinal herni

# 1. Introduction

Traumatic digestive perforation is the pathological opening in the wall of a hollow organ of the digestive tract following a trauma [1].

Several digestive disorders can cause peritonitis secondarily, including accidental ileal perforation [2]. This traumatic perforation can be due to a penetrating wound (stabbing, firearms), contusion of the abdomen (work and sports accident) or, exceptionally, be a complication of laparoscopy [3]. However, ileal perforation by a foreign body during reduction of an inguinal hernia is rare, hence the choice for the authors to report this rare clinical case.

Preoperative diagnosis of bowel perforation secondary to a foreign body is difficult [4].

Copyright © 2023 Author(s) retain the copyright of this article. This article is published under the terms of the Creative Commons Attribution Liscense 4.0.

<sup>\*</sup> Corresponding author: Diawara Mohamed Albert

Plain radiography of the abdomen can provide arguments for establishing the diagnosis by the presence of diffuse grayness and/or pneumoperitoneum. In case of doubt, ultrasound and CT can carry the diagnosis by highlighting intraperitoneal fluid. However, the definitive diagnosis is made intraoperatively. The treatment is medico-surgical and aims to eradicate the source of infection by trimming the traumatic perforation while fighting the infection and restoring the water-electrolyte balance [5]. The prognosis depends on the terrain, the time of consultation and the time of treatment.

# 2. Observation

CF... 37 years old, farmer, admitted on May 13, 2023 for abdominal pain on left inguino-scrotal swelling evolving for two days.

The onset of the symptoms would be progressive, marked by the occurrence of pain on a left inguino-scrotal swelling. Signs for which the patient would have used self-medication based on amoxicycline 1 g and paracetamol 1 g. after a period of calm, the same symptomatology occurs, which motivated him to consult our department for treatment. No particular background

Objectively ill seen conscious, cooperating, active attitude, normocolored teguments and conjunctivae with a satisfactory general state presenting the following parameters: BP = 137/82mmhg, FR = 22 cycles/min, pulse = 89 pulses/min, temperature = 36.7 °C.

On examination of the take-off zone: the abdomen was symmetrical, participating in breathing, there was an impulsive and expansive inguino-scrotal swelling on exertion, and a slight tussock in the left inguinal region. The examination of the other devices and systems did not reveal any particularity. At the end of this clinical examination, the diagnosis of a left inguino-scrotal hernia was made.

Objectively ill seen conscious, cooperating, active attitude, normocolored teguments and conjunctivae with a satisfactory general state presenting the following parameters: BP = 137/82mmhg, FR = 22 cycles/min, pulse = 89 pulses/min, temperature = 36.7 °C.

On examination of the take-off zone: the abdomen was symmetrical, participating in breathing, there was an impulsive and expansive inguino-scrotal swelling on exertion, and a slight tussock in the left inguinal region. The examination of the other devices and systems did not reveal any particularity. At the end of this clinical examination, the diagnosis of a left inguino-scrotal hernia was made.

Gestures: we first performed an extraction of the fishbone, the reviving of the edges of the perforation, suture of the perforation with 2/0 vicryl, cleansing of the abdominal cavity using two liters of 0.9% saline, additional appendectomy, parietal closure plan by plan on a drain in the Douglas fir + dressing. And in the second time we proceeded to the treatment of the hernia sac and the cure of the hernia according to Lichtenstein, parietal closure + dressing.

Postoperatively, he received ceftriaxone 1g twice a day, infusable metronidazole 500mg every eight hours and infusable paracetamol 1 g as needed for seven days.

His seventh postoperative day the postoperative course was marred by complications such as parietal suppuration at the left inguinal level and scrotal swelling. In front of this table, a sample of pus was taken for cytobacteriological examination + antibiogram which was corrected in accordance with the result of the antibiogram using erythromycin 500mg per day and a puncture at the level of the bursa bringing back inflammatory fluid .

Patient discharged on postoperative day 15 with marked improvement.



Figure 1 Intra operative image of a fishbone perforation



Figure 2 This image showed the fishbone extraction

# 3. Discussion

Intestinal perforations by foreign body (EC) are infrequent and are generally due to sharp objects, among which fish bones are often incriminated and can be responsible for perforations at all levels of the digestive tract with the first site being the small intestine. precisely at the level of the terminal ileum. These perforations can also be located at the level of a Meckel's diverticulum or a hernial sac [6].

In Chad, B M Kailma et al had reported two cases of ileal perforation by toothpick. Ileal perforation by a foreign body during the reduction of an inguinal hernia can be responsible for severe peritonitis with multiple organ failure [7]. However, these perforations are a rare cause of peritonitis. They should be suspected in children or in prisoners, psychotic patients or patients with psychological retardation, alcoholics or in the elderly who are toothless.

[8]. The diagnosis of these intestinal perforations by foreign body is difficult given the non-specificity of the clinical picture. Clinically, these perforations may manifest as peritonitis, appendicitis, lower gastrointestinal bleeding, intestinal obstruction, or may remain asymptomatic [8]. In our study, the patient was received in the picture of inguinal pain on left inguinal hernia not strangulated or engrossed. This justifies our inguinal approach. Imaging rarely highlights the foreign body and this because of the non-specific density of the foreign body on the scanner. In general, in 50% of

cases the definitive diagnosis is made by laparotomy, 19% by endoscopy, 14% by imaging and 12% by autopsy [9]. However, abdominal computed tomography is the examination of choice, making it possible to make the diagnosis by showing thickening of the wall of an intestinal segment, infiltration of the mesentery all around a linear calcified foreign body and the presence or absence of a pneumoperitoneum [6]. In our case, no imaging was performed, and the diagnosis was made intraoperatively during the treatment of an inguinal hernia. Peritonitis is a diagnostic and therapeutic emergency whose therapeutic management includes a medical component and a surgical component [7].

The treatment of those secondary to intestinal perforation by foreign body is essentially surgical (repair by primary suture of the perforation or segmental resection with anastomosis or stoma) possibly by laparoscopic route. [6]. Mortality and morbidity depend not only on the time of consultation but also that of surgical management.

# 4. Conclusion

Intestinal perforations by foreign body (FB) are infrequent and are generally due to sharp objects, among which fish bones are often incriminated. The definitive diagnosis is often made intraoperatively and the treatment is essentially surgical.

# **Compliance with ethical standards**

#### Acknowledgments

Through this article, we would like to thank our dear teacher, Professor, Aboubacar Toure for his effort to improve the scientific quality of this work.

#### Disclosure of conflict of interest

The authors declare that there were no conflicts of interest in the scientific writing of this work.

All of the authors who appear in this article have an equal share of and agree to the publication of this article in your journal.

# Statement of informed consent

Informed consent was obtained from all individual participants included in the study.

# References

- [1] Suter M, Kayoumi A. les lésions de l'intestin grêle et du colon dans les traumatismes fermés de l'abdomen.MédHyg 1992; (50): 69-2174.].
- [2] Abdel Karim Koumaré. les peritonites par perforation ileale en chirurgie « B » de l'hopital du point-« G » Mali Médical 2003 T XVIII N° 1&2
- [3] Jean YM, Jean LC. Péritonite aiguë. Rév Prat (Paris) 2001;(51): 2141-45
- [4] Karim ibn madjoud hassani, Imane Toughrai, péritonite par perforation grêlique secondaire à une arête de poisson, Pan Afr Med J. 2013 ; 15 : 107]
- [5] Oumar. Traore. Perforation digestives traumatiques dans le service de chirurgie générale du CHU Gabriel Touré.Th Med, Bamako 2010.
- [6] Abid M, Derbel R, Annabi S, Guirat A, Mzali R , Frikha MF, Ben Amar M, Beyrouti MI, Un coup de poignard abdominal chez un tunisien. Med Trop 2010 ; 70 : 77-79
- [7] Mohamed Moez Kammoun1, Rim Karray, Kais Regaieg, Mabrouk Bahloul et al. Une cause exceptionnelle des péritonites : une perforation iléale par un corps étranger lors de la réduction d'une hernie inguinale. Panafrican medical journalal – ISSN : 1937- 8688
- [8] B.M. Kaimba , A. Edzimbi , S.D. Akouya, P. Hervé. Perforation intestinale sur ingestion volontaire de cure-dents : à propos d'un cas à Ndjamena. Rev. méd. Madag. 2016 ; 6(1) : 716-718
- [9] Sealock RJ, Sabounchi S, Graham DY. Toothpick Perforation of the Intestines Presenting as Recurrent Abdominal Pain: Possible Roles of Abdominal Ultrasound and MRI. Clin Med Insights Case Rep 2013:6 131-5