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(CASE REPORT)

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Ileo-Sigmoidian Node: About A Case in the Visceral Surgery Department of the Donka National Hospital

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Abstract

The aim of this study was to report a clinical case of ileocaecal node in the visceral surgery department of Donka.

The ileosigmoid node or the ileosigmoid knot (ISK), is an exceptional clinical entity, it is a surgical emergency characterized by strangulation of the small intestine forming a knot around the base of the sigmoid colon with risk of rapid necrosis of the small intestine. And the colon.

The preoperative diagnosis of this condition is difficult because of its rarity and atypical radiographic results.

We report a case of an ileosigmoid node discovered in a 62-year-old subject who consulted in our department for an occlusive syndrome.

Keywords: Ileosigmoid node; Compound volvulus; Intestinal obstruction; Donka hospital

1. Introduction

The ileosigmoid node (ISN) is a double volvulus of the sigmoid and ileum with a risk of rapid progression to necrosis [1].

This is a rare surgical emergency, the preoperative diagnosis is difficult, due to its rarity and its clinico-radiological atypia. The treatment is surgical but the procedure remains a subject of controversy [2.3].

We report a case of an ileosigmoid node discovered in a 62-year-old subject who consulted in our department for an occlusive syndrome.

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2. Material and methods

We collected a case of the ileocecal node in the visceral surgery department of Donka National Hospital. This is an observational clinical study with one case. We had done an emergency workup including blood count, bleeding time, clotting time, and partial thromboplastin time. Kaolin. All parameters were at the limit of normal.

3. Observation

It was a 62-year-old man, a breeder from Gaoual; married who had consulted for:

-abdominal pain accompanied by, vomiting, stopping of materials and gas, abdominal distension, and agitation

All of this has been evolving over the past 24 hours. He was known to be hypertensive, poorly monitored. He had previously been operated on for: hydrocele and HID.

On examination, patient conscious, cooperating, active attitude writhing in pain, with altered general condition and good skin-mucous coloration. TA = 198/109 mmHg, temperature = 36.5 ° C

The abdomen was distended with an arch in the epigastrium, the site of widespread pain and wall defense. Intestinal peristalsis was inaudible.

On digital rectal examination: the rectal bulb was empty. Douglas was neither bulging nor painful

The laboratory work-up carried out in emergency revealed a hyperleukocytosis with GB at 10.1×10^{3} G / dl, a level of Hb at 13.04 g / dl, a creatinemia and a normal uremia

The unprepared abdomen x-ray showed a colonic-like hydro-aeric level and other hail-like hydro-aeric levels. (Figure 1)

The urgently requested abdominal CT scan revealed the appearance of a sigmoid colon volvulus with signs of intestinal distress and intraperitoneal effusion (figure 2)

At the end of the examination, we retained the diagnosis of OIA / PCV with suspicion of necrosis After intensive resuscitation, the patient was taken to the operating room under A / G: After a midline laparotomy and aspiration of 300 cc of blackish fluid.

Surgical exploration revealed a sigmoid volvulus on a node made by the volvulated ileum, it is the ileosigmoid node with extensive necrosis of the small intestine over 1m to 20 cm from the ileo-coecal angle and sigmoid loop necrosis (Figure 3)

We realized: An ileal resection of about 1 m from the small intestine (Figure 4) resulting in necrosis followed by end-toend ileo-ileal anastomosis

sigmoidectomy (figure 5) resulting in necrosis + colostomy according to Hartmann .Peritoneal toilet + drainage .We restored colorectal digestive continuity 3 months later, the consequences of which were simple



Figure 1 X-ray without preparation of the abdomen, a hydro-aeric image higher than wide

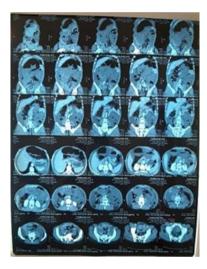


Figure 2 Abdominal CT scan showing sigmoid volvulus with evidence of intestinal distress



Figure 3 Intraoperative image of the ileosigmoid node with extensive necrosis of the hail and sigmoid



Figure 4 Surgical part of the resection of the necrotic ileum



Figure 5 Surgical part of the resection of the necrotic sigmoid

4. Discussion

The ileosigmoid node (NIS) or double ileosigmoid volvulus is a rare surgical emergency; it accounts for 7.6% of volvulus in France [4].

It is a node created by a volvulus of the sigmoid colon and small intestine, specifically the ileum [1].. NIS has been described in parts of Africa, Asia but remains rare in Europe. It affects the man of the fourth decade [4.5].

Several factors have been implicated to explain this pathology, Atamanalp et al mentioned anatomical predispositions: a hyper mobile small intestine caused by a meso that is too long and a short root can wind up at the foot of the sigmoid colon [5].

A second factor is food: the rapid repletion of the jejunum in patients who eat only one meal per day would promote its twisting around the empty ileum, thus destroying the sigmoid loop [6].

Alvert et al [4]. describe 4 types of NIS formation mechanisms, depending on the active digestive segment, responsible for the torsion,

in type I: the ileum is the active segment wrapping around the passive sigmoid

Type II: results from active sigmoid torsion which attracts passive hail

Type III: exceptional is the ileo-coecal junction that wraps around the sigmoid loop

While in type IV: indeterminate, it is not possible to differentiate the 2 segments.

The NIS causes a complex intestinal obstruction by double strangulation of the mesenteric vessels intended for the slender loops and the sigmoid.

This mechanism results in rapid ischemic necrosis of the 2 volvulated segments [7]. The preoperative diagnosis of this affection is difficult because of its rarity and its clinical-biological atypia. This makes the diagnosis obvious only intraoperatively, however it is possible in 20% of cases [1,2,3,7].

The patient consults for a sudden onset occlusive syndrome, marked by acute central abdominal pain which can wake the patient from sleep, the patient can specify the exact time of onset. Then the pain becomes constant and generalized associated with vomiting. In 52% of the cases, the patient presents a state of hypovolemic shock [1,2,8]. Clinical examination reveals moderate abdominal distension with abdominal tenderness or defense on palpation, with abdominal silence when necrosis has already set in [8.9].

PSA may occasionally show the character of a closed loop double occlusion with sigmoid hydro-aeric levels in the upper right quadrant, and others of a hail type that may be lateralized to the left, most often it shows 1 VCS or an isolated small bite [1,2,8].

The abdominal CT scan can aid in the diagnosis by showing the vortex sign with a median deviation of the coecum, descending colon, and the superior and inferior mesenteric vessels which will converge on this vortex [5,7,10].

Faced with these radiological findings of colon occlusion associated with the clinical triad of hail occlusion, the diagnosis of NIS is plausible in 71% of cases. It is essential to differentiate it from VCS because endoscopic reduction is contraindicated [8]. Therapeutic management combines fluid and electrolyte rebalancing and an adapted and rapid surgical intervention [2,3].

The surgical treatment of NIS is a subject of controversy. When the bowel is viable, some opt for the temptation to simply lift the knot, others prefer resection to prevent recurrence. In the event of necrosis, resection of the small bowel, colon and node in one piece is recommended associated with end-to-end grelo-grelic anastomosis and left iliac colostomy [8]. The mortality of the NIS is very high, it can reach according to some authors 73% [2].

5. Conclusion

Ileosigmoidian Node is a rare cause of OIA, which is difficult to diagnose. The discovery of an aspect of double volvulus on a CT scan prompts urgent surgery. Only early preoperative diagnosis with rapid management can improve the prognosis of this pathology, by reducing morbidity and mortality due to diagnostic delay.

Compliance with ethical standards

Acknowledgement

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Disclosure of conflict of interest

The authors declare no conflict of interest. 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] Rahioui Fatima, Daoudi Amina, Ouakasse Samira and Mohammed Hassan Alami Nœud Ileo-Sigmoïdien, Une Complication Rare Du Post-Partum : A Propos D'un Cas. Int. J. Adv. Res. 8(06) : 234-236.
- [2] BY Sidibé, T Koné, A Maïga, S Kanté, A Bah, S Konaté et al. Le nœud iléo-sigmoïdien : un rare cas d'occlusion intestinale aigüe rapporté au CHU Gabriel Touré. Jaccr Africa. 2020; 4(1): 441-444.
- [3] Hind B, Ouijdane Z, Laila J. Un cas de nœud iléo sigmoïdien chez une femme en post-partum. Pan Afr Med J. 2019; (32): 106.
- [4] Alver O, Oren D, Tireli M, Kayabasi B, et al. Ileosigmoid knotting in Turkey: review of 68 cases. Dis Colon Rectum. 1993; 36(12):1139–47.
- [5] Atamanalp SS, Oren D, Basoglu M, Yildirgan MI, et al. Ileosigmoidal knotting: outcome in 63 patients. Dis Colon Rectum. 2004; 47(6): 906–10.
- [6] Shepherd JJ. Ninety-two cases of ileosigmoid knotting in Uganda. Br J Surg. 1967; 54(6): 561–6.
- [7] Journé C, Ravard C, Monneuse O, Pilleul F. Noeud iléo-sigmoïdien: une urgence chirurgicale. J Radiol. 2008; 89(12): 947–9.
- [8] Fatimazahra Bensardi, Khalid Elhattabi, Abdelaziz Fadil, Nadia Benissa et al : Le nœud ileo-sigmoidien: à propos de 2 cas Pan African Medical Journal. 2012; 11: 43.
- [9] S. Selcuk Atamanalp:Ileosigmoid Knotting EAJM: 41, August 2009: 116-119.
- [10] Baheti AD, Patel D, Hira P, Babu D. Ileosigmoid knot: A case report. Indian Journal of Radiology and Imaging. 2011; 21: 147–149.