Case study

Small bowel obstruction by a Primary flange on mesenteric ganglionic tuberculosis : A case report

ABSTRACT

Lymph node tuberculosis is a relatively common form of extrapulmonary disease, and is essentially a therapeutic challenge. His diagnosis is difficult to establish: ultrasound, CT and nuclear magnetic signs are not specific, but some lesion associations are evocative. Knowing how to evoke the diagnosis of tuberculosis is the indispensable condition for a rapid and adapted management, because the vital prognosis is at stake.

We present a rare case of a Small bowel obstruction by a Primary flange on mesenteric ganglionic tuberculosis, who benefited from a surgical cure

Keywords: tuberculosis, flange, small bowel , mesenteric ganglionic

1. INTRODUCTION

Tuberculosis remains a global public health problem. It is caused by Mycobacterium tuberculosis [1].

Lymph node tuberculosis is a relatively common form of extrapulmonary disease, and is essentially a therapeutic challenge. His diagnosis is difficult to establish: ultrasound, CT and nuclear magnetic signs are not specific, but some lesion associations are evocative. [17].

Mesenteric lymph node tuberculosis is rare and difficult to treat. [18]

We report the case of intestinal occlusion caused by primary flange of mesenteric ganglionic tuberculosis .

2. CASE PRESENTATION

We report the case of a 37 year old male patient, with history of HIV under treatment, was admitted in our emergency department with acute abdominal pain, vomiting and an occlusive syndrome.

The clinical examination found a patient in good general condition, with no disorder of the hemodynamic state ;
TA : 110/60 mmHg Fc: 64 bpm, saturation: 98%,
The abdominal examination found a distended painful abdomen.
And a normal laboratory findings.

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A CT scan imaging revealed an obstruction of the small bowel on primitive flange, this diagnosis has been retained because the patient has no surgical history.

The patient has been conditioned with a nasogastric tube during 24 hours with no improvement. So a surgical treatment was planned under general anesthesia in the emergency operating room.

The surgical exploration found an obstruction of the small bowel on a flange between the ileum and a mesenteric adenopathy, the flange has been cut with the scissors and the node has been removed.

The patient recovered well and left the hospital in the fifth day.

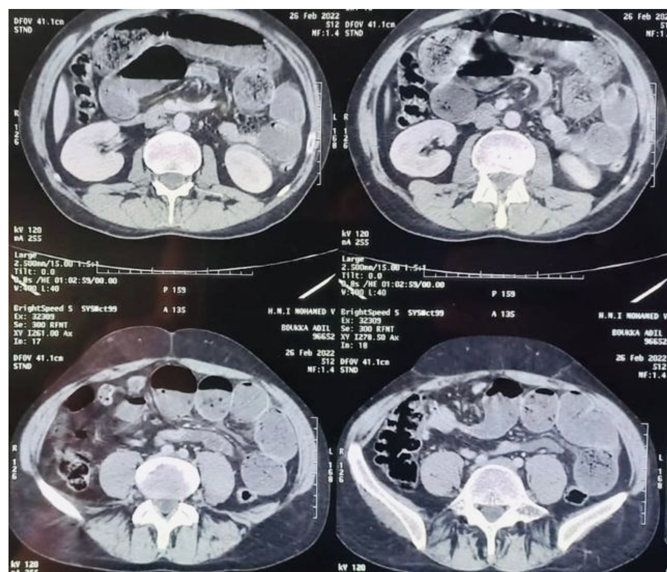

Fig. 1. CT-scan imaging showing an obstruction of the small bowel

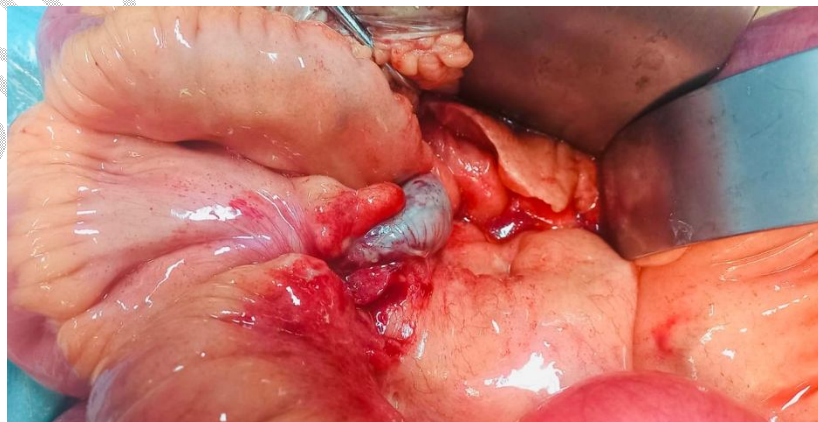

Fig. 2. Operatory imaging showing a mesenteric adenopathy

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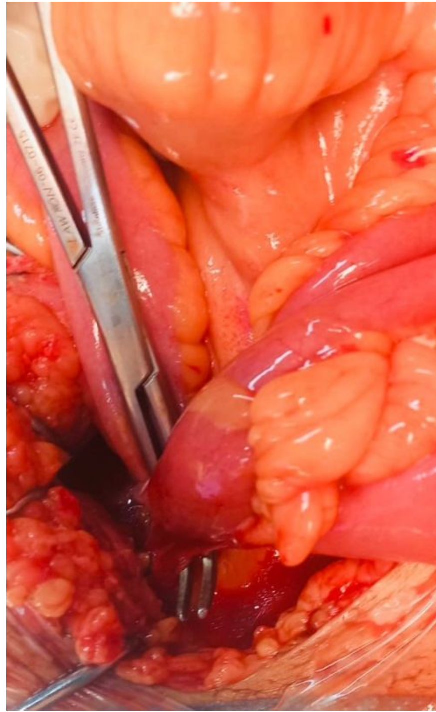

Fig. 3. Surgical photo showing the flange between the ileum and a mesenteric adenopathy

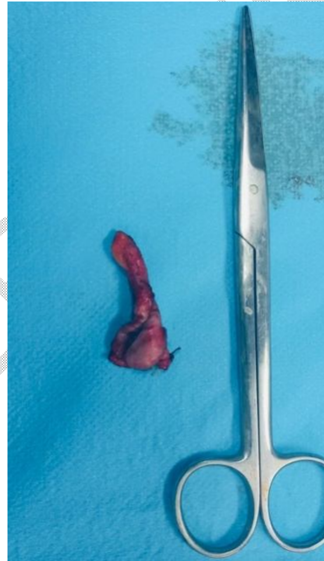

Fig. 4. Mesenteric node after removing

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3. DISCUSSION

Tuberculosis remains a global public health issue. According to the World Health Organization (WHO) in 2016, 10.4 million people contracted it with 1.7 million deaths [1].

It is due to Mycobacterium tuberculosis. 14% of tuberculosis cases reported worldwide are extrapulmonary [2]. Gastrointestinal involvement accounts for 3 to 5% of all visceral locations. It is revealed by intestinal obstruction in 20-27% of cases [3].

In Morocco, 26,000 to 27,000 new cases of all forms of tuberculosis are detected annually. Extrapulmonary TB accounts for 46% of TB cases and is dominated by lymph node and pleural involvement, which accounts for 70% of extrapulmonary forms [4]. Lymph node tuberculosis is a relatively common form of extrapulmonary disease, and is essentially a therapeutic challenge.

The incidence of TB infection has risen not only in developing countries but also in developed countries. This is partly explained by acquired immunodeficiency virus (HIV) infection, precariousness and immigration [6]. This has led to an increase in the incidence of extrapulmonary localizations, which account for nearly 1/3 of the tuberculosis cases reported in Morocco [5]. Abdominal localization is a relatively common extrapulmonary form, accounting for 5-10% of all localizations [7]. This frequency is higher and could double to triple in HIV-positive subjects.

Digestive involvement may be primary by direct ingestion of mycobacterium or secondary to highly bacilliferous pulmonary lesions by haematogenic or lymphatic route [8]. The bacterial agent is usually the bovine or human Kokh bacillus, exceptionally atypical mycobacteria in immunocompromised subjects [8].

TB infection can also be of interest to any other segment of the digestive tract. It is often represented by agglutinated loops, hypertrophic digestive parietal infiltration with peritoneal nodules, and a cluster of deep lymphadenopathy including mesenteric. But this aspect may be lacking, and before an irregular hypertrophic off-centered digestive infiltration, a tumor origin is often evoked [9]. Lymph node localization in intra-abdominal tuberculosis may also be the cause of the pseudo-tumoral appearance.

Ultimately, if the urgency and clinical symptomatology allow them to be performed safely, endoscopic examinations are the most useful [10]. Indeed, the contribution of endoscopy is essential, it allows the detection of lesions, even the most superficial [11, 12]. Its main interest is that it allows the realization of biopsies with histological and bacteriological studies (culture) and then avoids morbidity and mortality related to an exploratory laparotomy [13,14].

Knowing how to evoke the diagnosis of tuberculosis is the indispensable condition for rapid and adapted management, because the vital prognosis is at stake [9]. Laparotomy is sometimes the only recourse in case of negativity of the echo or scano-guided puncture [9]. Indeed, 20 to 40% of patients [15] will have a laparotomy, either in emergency before a complication (stenosis, occlusion, compressive mass, flattening of certain casein cavities, perforation and fistula), or for diagnostic purposes.

This surgical treatment must be combined with TB treatment. The surgical treatment is not standardized and depends primarily on the reason for the surgical indication. Thus, the removal of one or more obstacles in case of occlusion or a hemostasis process in case of massive bleeding will usually make a resection necessary. It also depends and especially on the lesions observed during the surgical exploration, which most often involve intestinal resections with or without restoration of continuity or internal bypass or stoma[16].

4. CONCLUSION

The diagnosis of intestinal tuberculosis is difficult; Knowing how to evoke the diagnosis of tuberculosis is the indispensable condition for a rapid and adapted management, because the vital prognosis is at stake.

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