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# Bowel Obstruction Due to Tuberculosis Band: A Case Report and Review of the Literature

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### 1. Abstract

Peritoneal tuberculosis accounts for 0.1-0.7% of all tuberculosis patients, the clinical signs are non-specific apart from a complication; The incidence of intestinal obstruction due to tuberculosis bands from 12% to 60%. Tuberculosis can affect any part of the body, but the abdomen is one of the most common sites after the lungs, the clinical presentation of abdominal tuberculosis is usually nonspecific and, therefore, often leads to a delay in diagnosis and thus the development of complications such as intestinal obstruction, Imaging plays an important role in the positive diagnosis of the occlusion. We report the case of a 61-year-old patient with no particular pathological history admitted to the emergency room with a bowel obstruction syndrome which the surgical exploration found a bowel obstruction on a primary tuberculosis band.

## 2. Case Report

### 2.1. Introduction

The peritoneum is one of the most common external localizations of pulmonary tuberculosis, which poses a public health problem in endemic regions of the world, the frequency of which is accentuated by the increase in immunosuppressive therapy and the AIDS epidemic. Peritoneal tuberculosis represents 0.1-0.7% of all tuberculosis patients [1]; The incidence of intestinal obstruction due to tuberculosis ranges from 12% to 60% [2] we report the case of a 61-year-old patient with no particular pathological history who was admitted to the emergency room with a bowel obstruction syndrome which the surgical exploration found a bowel obstruction on a primary tuberculosis band . the work has been reported in line with the SCARE 2020 criteria [3].

### 2.2. Patient and Observation

This is a 64-year-old male patient with no particular pathological history admitted to the emergency room for a bowel obstruction syndrome including cessation of the emission of feces and gas, vomiting and abdominal pain associated with weight loss, asthenia and anorexia. The physical examination revealed a conscious patient with hemodynamic and respiratory stability, BMI of 17 kg/m2, slightly distended abdomen. Abdominal CT scan shows distension of a few small intestines measuring 4.9 cm, seat of NHA upstream of a transitional level located at the level of the tight iliac fossa following a primitive band (Figure 1).



**Figure 1:** CT scan showing a bowel obstruction made by the tuberculosis band (arrow).

The surgical procedure consisted by a section of a primary parietal band of the last iliac loop with millimetric granulation of the mesentery (Figure 2).

The postoperative follow-up was simple, the patient resumed his

transit at day 2 postoperatively, a check-up in search of another tuberculous focus was requested which came back negative. The anatomopathological examination of the biopsies showed an epithelioid cell granuloma with central caseous necrosis in relation with a peritoneal tuberculosis (Figure 3).

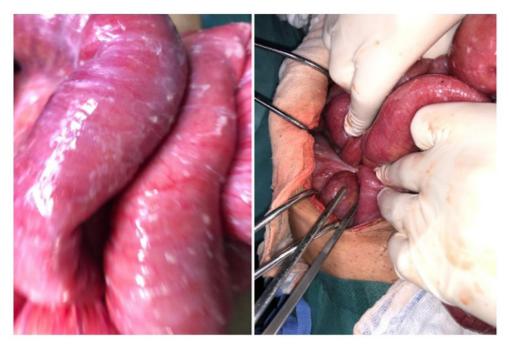


Figure 2: per operative image showing a bowel obstruction made by a tuberculosis band located in the right iliac fossa with granulation on the small intestine.

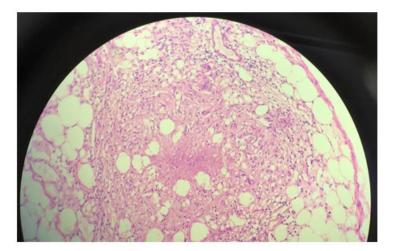


Figure 3: histological image showing a epithelioid cell granulomas with central caseous necrosis in relation to peritoneal tuberculosis with

### 3. Discussion

The incidence of peritoneal tuberculosis has increased worldwide due to the increase in immunocompromised patients and free immigrants ,it accounts for 0.1 to 4% of all tuberculosis disease [4]. The incidence of intestinal obstruction due to tuberculosis ranges from 12 to 60%. Tuberculosis can involve any part of the body, but the abdomen is one of the most common sites of involvement after the lungs [5]. Modes of infection of peritoneal tuberculosis include hematogenous spread from a primary pulmonary focus that later reactivates or as a result of miliary tuberculosis, spread may be by

lymphatic route from infected lymph nodes or by ingestion of bacilli either from sputum or from infected sources such as dairy products, The clinical presentation of abdominal tuberculosis is usually non-specific and, therefore, often leads to a delay in diagnosis and thus to the development of complications such as intestinal obstruction [7]. The tuberculin skin test is difficult to interpret and its sensitivity varies between 14 and 100%. Their sensitivity varies from 40% in peritoneal forms to 100% in intestinal forms, with an overall specificity of around 80% [8]. In the case of occlusion, CT scan can confirm the diagnosis, the site with a sensitivity of 94% to 100% and a specificity

of 90% to 95%, as well as the search for signs of complication, in particular signs of ischemia [9]. Surgical treatment is the cornerstone of the management of mechanical bowel obstruction. The laparoscopic approach has proven to be safe and feasible, especially when it is a single band and the bowel is not very distended. Conversion to laparotomy is indicated in the following cases non-viable bowel identified by laparoscopy and in case of inability to identify the site of obstruction, Treatment consists of section of the band and, if necessary, resection of the small necrotic loop [10] surgical treatment is associated with anti-bacillary chemotherapy is the same as that of the national tuberculosis control program This patient was treated according to protocol 2 RHZ/4RH; the duration of treatment was six months with a favorable evolution [2].

### 4. Conclusion

abdominal tuberculosis is the most frequent site of extra pulmonary tuberculosis, its incidence is accentuated given the increased administration of immunosuppressants as well as the increase in the incidence of immune deficiency, it can be revealed by a mechanical occlusion, particularly on a flange, requiring in addition to the medical treatment an emergency surgical intervention. we report the case of a 61-year-old patient with no particular pathological history who was admitted to the emergency room with a bowel obstruction syndrome which the surgical exploration found a bowel obstruction on a primary tuberculosis band.

### References

- Kim HK, Kim SE, Park MI, Park SJ, Moon W, Kim JH et al. A Case of Tuberculous Peritonitis Presenting as Small Bowel Obstruction. Korean J Gastroenterol Taehan Sohwagi Hakhoe Chi. 2017; 69: 308-11.
- Lahmiri M, Errabih I, Tamzaourte M, Krami HE, Benzzoubeir N, Ouazzani L et al. Peritoneal tuberculosis revealed by a surgical emergency picture. Hegel. 2012; 3: 41-6.
- Agha RA, Franchi T, Sohrabi C, Mathew G, Kerwan A, Thoma A et al. The SCARE 2020 guideline: updating consensus Surgical CAse REport (SCARE) guidelines. Int J Surg. 2020; 84: 226-30.
- Bennani A. coll. Peritoneal tuberculosis. A propos de 300 cas. La tuberculose abdominale Ed. Masson Paris; 1987.
- Chalya PL, Mchembe MD, Mshana SE, Rambau P, Jaka H, Mabula JB et al. Tuberculous bowel obstruction at a university teaching hospital in Northwes tern Tanzania: a surgical experience with 118 cases. World J Emerg Surg WJES. 16 mars 2013; 8: 12.
- Sharma MP, Bhatia V. Abdominal tuberculosis. Indian J Med Res. 2004; 120: 305-15.
- 7. Iqbal T, Khan A, Iqbal A, Tahir F. Obstruction due to... Google Scholar [Internet]. [cited March 25, 2021].
- Liao CH, Chou CH, Lai CC, Huang YT, Tan CK, Hsu HL et al. Diagnostic performance of an enzyme-linked immunospot assay for interferon-γ in extrapulmonary tuberculosis varies between different sites of disease. J Infect. 2009; 59: 402-8.

- Maglinte DD, Heitkamp DE, Howard TJ, Kelvin FM, Lappas JC. Current concepts in imaging of small bowel obstruction. Radiol Clin. 2003; 41: 263-83.
- Abdelwahed Y, Saber R, Imen BI, Hakim Z, Ayoub Z. A case report of small bowel obstruction secondary to congenital peritoneal band in adult. Int J Surg Case Rep. 2017; 30: 23-5.