

# INTESTINAL TBC WITH TUBERCULOUS PERITONITIS A CASE REPORT

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**Abstract:** A 34 year-old man, with low socio-economical level, is admitted in our clinic in emergency, with the clinical picture of acute surgical abdomen without specific etiology following laboratory investigations. Laparoscopic surgical intervention specifies the diagnosis and determinate the surgical therapeutic conduct. Intraoperatorily, he is suspected of intestinal tuberculosis with tuberculous peritonitis, the diagnosis being confirmed after surgery and after the laboratory tests. Postoperative evolution and long term management were applied by the TBC Medical System with favourable evolution.

**Keywords:** intestinal TBC, tuberculous peritonitis, pulmonary TBC, diagnostic celioscopy

**Rezumat:** Prezentăm cazul unui pacient, bărbat în vârstă de 34 ani, cu nivel socio-economic scăzut, internat în clinica noastră de urgență, cu tablou clinic de abdomen acut chirurgical fără etiologie precizată în urma investigațiilor paraclinice. Se intervine chirurgical laparoscopic pentru precizarea diagnosticului și stabilirea conduitei chirurgicale terapeutice. Intraoperator se ridică suspiciunea de tuberculoză intestinală cu peritonită tuberculoasă, diagnostic confirmat postoperator după examenele de laborator. Evoluția postoperatorie pe termen lung, după dispensarizare și tratament în rețeaua de fiziologie teritorială este favorabilă.

**Cuvinte cheie:** tbc intestinală, peritonită tuberculoasă, tbc pulmonar, celioscopie diagnostică

## INTRODUCTION

Abdominal tuberculosis is determined by the Mycobacterium tuberculosis infection, being transmitted most commonly by hematogenic way from a primitive lung source (1). Abdominal TBC represents 11% of all extrapulmonary localizations.(2,3,4) Approximately 25% of the patients with pulmonary TBC have also an abdominal interest, the risk of abdominal affection increasing with the severity of lung lesions.(2,4).From all the abdominal localizations the most common is peritoneal TBC with approximately 4-10% of all extrapulmonary localizations, being followed by the small bowel and the cecum localizations.(2,4) Intestinal TBC is

the most common localization among the gastrointestinal tract.(2,5) In 10% of cases the infection is determined by the contaminated food reaching in the intestine. In most of the cases the lesion is secondary, either by swallowed sputum, the localization being on the ileocecal segment in 50% of the cases, or through blood dissemination, or by local contamination.(1,2)

## CASE REPORT

In our service is admitted in emergency a 34 years-old country man without occupation, with low socio-economical level. The patient was in bad condition, with diffuse abdominal pain, with preponderant intensification of the pain in the right iliac fossa and also with irradiation to the epigastric and umbilical area. Abdominal pain was accompanied by nausea, inappetence, moderate abdominal meteorism, diarrhoea stools. The patient reported a relatively sudden onset by 24-36h ago of the symptoms, which gradually increased in intensity by altering general condition.

On the local examination the abdomen was normal complied, with moderate meteorism, building of breath, with signs of peritoneal irritation, moderately painful in rest, and diffuse palpatory painful with intensification in the right iliac fossa. General examination of the devices and systems shows a minimal hipoanabolic syndrome.

Pathologically, the patient presents minimal leucocytosis, VSH 85mm/h, fibrinogen 756 mg/dl; without other notable modifications of biological constants.

At abdominal echography: normal liver, gall bladder, pancreas, spleen and kidney; small bowell with aerocolia; Douglas space with moderate quantity fluid.

Pulmonary X-ray describes moderate reduction and of pulmonary transparency in the bilateral apical segments, with suspicion of pulmonary TBC (picture no. 1); on abdominal x-ray have been revealed hydroaeric levels on the small bowell without signs of pneumoperitoneum. (picture no. 2)

Laparoscopic surgical intervention with preoperative diagnosis of acute surgical abdomen suggested by the clinical and laboratory investigations,

## CLINICAL ASPECTS

under general anaesthesia, was proceeded for diagnosis and to determinate the appropriate surgical conduct. Intraoperatory we observed intense inflated small bowel and colon; its not observed any perforation of the cavitary supramezocolic organs (administration of blue methylene on the nazogastric probe without any peritoneal evidence); in the inframezocolic area it is observed granulomatous lesions on the ileum and jejunum segments of the small bowell with edema and hyperaemia in both the intestine and the mezeneterum (fig. 3-6); on the parietal pelvin peritoneum we observed small granulary lesions (picture no. 7); moderate quantity of serocitrin liquid in the Douglas and Morrison spaces. (picture no. 8). intestinal tuberculosis with tubercolous peritonitis. We decide to limit the surgicalal intervention to diagnostic celioscopy, peritoneal biopsy, sampling peritoneal fluid for bacteriological laboratory tests, peritoneal lavage and drainage.

Postoperatory evolution on long-term, after treatment and counseling in the teritorialy ftziology clinic it is favorable.

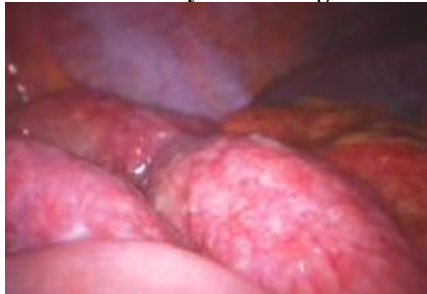
**Picture no. 1. Pulmonary X-ray**



**Picture no. 2. Abdominal x-ray**



**Picture no. 3. Inflammatory block in right iliac fossa**



**Picture no. 4. Ileum granulomatous lesions**



**Picture no. 5. Jejunum-ileum granulomatous lesions**



**Picture no. 6. Jejunum granulomatous lesions**



**Picture no. 7. Small granulary lesions on the parietal pelvin peritoneum**



**Picture no. 8. Serocitrin liquid intraperitoneum**



### DISCUSSIONS

Intestinal TBC its known at the persons with nutrition deficiency and immunosuppression especially between 20-50 years (1,5). The symptoms are unspecific, the clinical features including: abdominal pain, weight loss, fever, inappetence, abdominal distention going to the acute abdomen in case of occlusions or perforations (2,3,4).

The are described several clinico-morfopatological forms in the specialty literature:

- a stenosis form with clinical manifestation including abdominal colicative pain, with cicatrix-stenosis lesions type and atrophy especially in the ileum and jejunum segments;
- an enteroperitoneal a form in which, it is almost formed an abdominal plastron in the right iliac fossa with typical granulations in the ileum and cecum level, with clinical manifestations including clinical paroxysmal abdominal pain, diarrhea, vomiting;
- an ulcerate form with an occlusive phenomena and intestinal perforations.(1,6)

Peritoneal TBC it is presented as two morfopatological forms. The mosty type or early stage, characterized by the presence of ascites and the adusty form in which is producing a lesions progresion appearing a plastical peritonitis.

The clinical feature is unspecific being characterized by polimorfism. Biologically is described a low leucocytosis, limfocytosis and increased VSH. At the pulmonary X-ray examination occur manifest or sechelry changes in 80% of the cases, Abdominal echografy shows ascites in variable quantity.(2,4)

Laparoscopical intervention is the method which specifies the peritoneal TBC being an elective procedure. Peritoneal laparoscopic biopsy with histological examination and prelevation of the ascites liquid it is a method with maximal accuracy in the diagnosis of peritoneal tuberculosis.(2,7,8)

Surgical treatment used in the past, is rarely today because of the favorable answer to the antituberculous treatment, keeping its place in emergency, in case of occlusion complications or intestinal perforations with peritonitis.(2)

### CONCLUSIONS

- Peritoneal tuberculosis is a rare location of TBC pathology.
- Can be simultaneous or to succeed to a manifest pulmonary form.
- Can have features of chronic digestive suffering, although it may also evolve as a acute suffering.
- Unspecific symptoms make often impossible preoperatory diagnosis.
- Preoperatory suspicion of intestinal TBC can be suggested by the simultaneity of pulmonary lesions.
- The intraoperatory differential diagnosis shall consider a series of pathological entities with enteroperitoneal location (peritoneal carcinomatosis, pancreatitis, Crohn disease, etc.).

- In acute uncomplicated forms of stenosis, peritonitis, etc. surgical intervention it is resumed to biopsy and peritoneal fluid sampling for determining (confirmation) by laboratory tests.
- Suffering can have a repetitive nature, with the recurrence of acute manifestation until to a specific treatment.
- The acute type sometimes represents an intuitive pathology in preoperatory phase, intraoperatory being found specific lesions confirmed by laboratory tests.

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