# Atypical form of peritoneal tuberculosis

# Forme atypique de la tuberculose péritonéale

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# RÉSUMÉ

Il s'agissait d'une femme agée de 48 ans présentant une masse du flanc droit. A l'examen il existait une masse du flanc droit de 5 cm de grand axe, dur et douloureuse, centrée par un orifice fistule d'un diamètre de 5 mm. La tomodensitométrie abdominale a montré une structure tissulaire intra-péritonéale au depend du péritoine pariétal en regard de l'hypochondrie gauche. Une biopsie scanno-guidée a été effectuée. L'examen anatomo-pathologique a révélé des lésions inflammatoires non spécifiques. L'évolution a été marquée par l'apparition d'une fistule purulente en rgard du site de ponction. Une biopsie des berges de l'orifice fistuleux de l'hypochondrie gauche a été réalisée. L'examen anatomo-pathologique a conclu à la présence d'un infiltrat granulaire avec une nécrose caséeuse confirmant le diagnostic de tuberculose. La patiente a été mise sous traitement anti-tuberculeux avec une bonne évolution Clinique et radiologique.

### Mots-clés

Tuberculose, localisation extrapulmonaire, péritoine, fistule cutanée

### SUMMARY

It was a 48-year-old woman with a right flank mass. On examination there was a hard and painful mass of the right side, centered by a fistula orifice with a diameter of 5 mm. Abdominal computed tomography showed an intraperitoneal tissue structure in relation to the parietal peritoneum in the left hypochondria. A scanno-guided biopsy was performed. Pathological examination revealed non-specific inflammatory lesions. The evolution was marked by the appearance of a purulent fistula in the puncture site. A biopsy of the margins of the fistulous orifice of the left hypochondria was performed. Pathological examination found a granular infiltrate with caseous necrosis confirming the diagnosis of tuberculosis. The patient was put under anti-tuberculosis treatment with a good clinical and radiological evolution.

# Key-words

Tuberculosis, Extra pulmonary location, peritoneum, cutaneous fistula

Tuberculosis still remains a serious public health problem [1, 2]. Peritoneal tuberculosis represents 0.1 to 4% of extra-pulmonary presentation, constituting the sixth localization after the ganglionic, genito-urinary, osteoarticular, miliary and meningeal forms [1]. Besides the atypical forms within the endemic zones, the diagnosis of peritonitis tuberculosis within its atypical forms is a real challenge facing clinicians.

We reported an observation testifying the diagnostic difficulties raised by an atypical form of peritoneal tuberculosis.

# **OBSERVATION**

A 48-year-old woman with no previous past medical history, presented during six months a mass at the right flank with weight loss. Physical examination, showed apyrexia and a good general health status. The abdominal mass located at the right flank, had a diameter of 5 cm, was rather hard, painful, fixed to the deep and superficial levels and centered by a fistulous orifice of a 5-mm-diameter, leaving it to some pus to spring up at pressure (Figure 1), the C-reactive protein was at 46mg/l and the white blood count at 88000elts/mm.



Figure 1: fistulous orifice at the right flank in left lateral decubitus patient.

The abdominal ultra sound scan concluded to the presence of a 114\*62 mm size subcutaneous mass, at the level of the right side, which was hypo acrogenous, heterogeneous and cloistered. The abdominal computed tomography (CT) scan showed up a cystic formation at the level of the right side associated with an intraperitoneal tissue- structure linked to the parietal peritoneum at left hypochondria (Figure 2). A scanned-guided biopsy of the tissue formation was carried out. The pathological examination concluded to a non-specific inflammatory reorganization. The evolution was marked

by the appearance of a purulent-fistula progression that was rather little productive in relation to the site of the puncture. A biopsy of the surroundings fistulous orifice at the left hypochondria was then carried out. The pathological examination showed a granular infiltrate with caseous necrosis locations confirming the diagnosis of tuberculosis (Figure 3). The patient was then put under anti-tuberculosis treatment with good clinical progress.

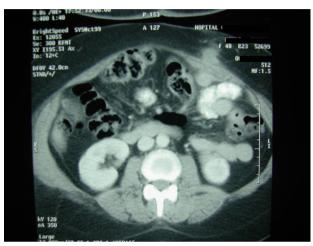


Figure 2: Abdominal CT scan: intra-peritoneal tissue- structure linked to the parietal peritoneum at the left hypochondria.

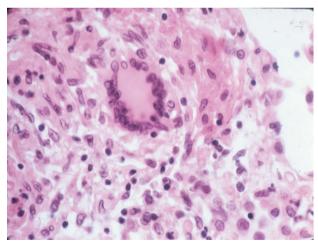


Figure 3: Granular infiltrate caseous necrosis.

# **DISCUSSION**

At our knowledge, we report the first case of peritoneal tuberculosis manifested by abdominal mass fistulized to the skin. Peritoneal tuberculosis is a sub-acute disease and its symptoms quite often develop throughout many months. The clinical presentation of the peritoneal tuberculosis is generally little specific [1-7]. The signs that are most found out are the abdominal pains in 64 to 100%

of cases, ascites in 73 to 96% of cases and fever in 46 to 64% of cases [2, 4]. That's why, more rigorous diagnostic approach should be undertaken in order to be able to evoke and then confirm the diagnosis. The abdominal scan might show up free or cloistered ascites, certain adenopathies and a peritoneal or mesenteric thickening. The signs that are found out in the scan examination could be confirmed by the CT scan. The real contribution of imaging lies within the framework of the realization of guided biopsies [1]. This diagnostic tools would seem to be guite promising, it is less invasive and cheaper however it might lead us to error owing to the lack of sensitiveness and the great number of false negatives. Such was the case of our observation where the biopsy was not conclusive and where we were obliged to resort to a surgical biopsy. At present, laparoscopy remains the reference examination to establish the diagnosis of peritoneal tuberculosis [1, 8, 9]. It allows the exploration of the peritoneal cavity and provides the possibility to carry out biopsies for the pathological and bacteriological analysis [1, 8, 9]. The macroscopic examination of the peritoneum coupled with the diagnosis highlights the diagnosis in 80 to 95% of the cases [1].

#### CONCLUSION

Peritoneal tuberculosis actually raises certain diagnostic issues due to the absence of clinical and biological specificity. Facing an abdominal mass fistulized to the skin with chronic evolution and with no obvious sepsis, the tuberculosis origin must be evoked. The diagnostic confirmation is histological.

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