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Case Report

Peritoneal Tuberculosis in The Form of Peritoneal Carcinosis in Postmenopausal Women

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ABSTRACT:
Tuberculosis, which is still endemic in Algeria and more generally in Africa and Asia, is a contagious microbial disease caused by Mycobacterium tuberculosis. Abdominal involvement is rare and ranks fourth among extra-pulmonary localisations. It is polymorphic and its diagnosis is often difficult. In its abdomino-pelvic location, it may mimic ovarian cancer, which may wrongly lead to extensive and morbid surgery. We report a case of peritoneal tuberculosis in a postmenopausal woman with an appearance of peritoneal carcinosis on laparoscopy.

Keywords : Tuberculosis, peritoneal carcinomatosis, ovarian cancer, laparoscopy, case report.

INTRODUCTION:

Diagnosis of certainty requires invasive investigations, i.e. laparoscopy or even laparotomy with biopsies. Only histological confirmation justifies the initiation of anti-bacillary treatment. Tuberculosis is a public health problem in developing countries, and this is still the case in Algeria. It has been on the increase in recent years. With 8 to 10 million new cases per year and 3 million deaths worldwide [1]. Peritoneal tuberculosis is rare, accounting for 0.1 to 4% of all localised cases. Diagnosis is difficult because of the non-specific clinical pictures, the low sensitivity of biological and radiological tests, the pauci bacillary appearance of extrapulmonary involvement, and the unavailability of adenosine deaminase and PCR assays. Laparoscopy with biopsy is very useful for histological diagnosis [2].

Patient and Observation:

Patient Information:

We report the case of a 59-year-old patient, postmenopausal for 9 years, with a history of total thyroidectomy, referred to our department for endoscopic exploration for suspected peritoneal carcinosis. The patient presented with an increase in abdominal volume (Figure 1) against a background of chronic abdomino-pelvic pain, without a febrile context and with anorexia. The clinical examination revealed that the patient was in good general condition with good haemodynamic constants, a distended abdomen with frank dullness of the flanks, and no adenopathy, particularly inguinal adenopathy. Abdominal and pelvic ultrasound revealed two ovaries with a solid cystic appearance, measuring 4 cm long on the left and 3 cm on the right, and a moderate amount of peritoneal effusion. Magnetic resonance imaging described two ovarian masses suspicious of malignancy, with bilateral hydrosalpinx and ascites with signs of carcinosis. CA 125 was 133 IU/ml.

Therapeutic Intervention:

In view of this clinical situation, we decided to perform laparoscopy to assess the carcinosis and take biopsies.

Open laparoscopy was performed under the left rib (Figure 2) in order to avoid any adhesions. Exploration

revealed a medium-sized ascites of lemon-yellow colour (Figure 3), and after aspiration a retroverted uterus with multiple implants was discovered (Figure 4). The right adnexa showed an inflamed tube with whitish millimetre implants (Figure 5), and when the tube was manipulated, caseous pus came out of the pinna (Figure 6); the right ovary was not visualised.
The implants spread throughout the abdominal cavity: peritoneum (Figure 7), omentum, suspensory ligament of the liver (Figure 8).
Peritoneal carcinosis or tubercular miliary? We completed our procedure with multiple biopsies of the various organs: adnexa, abdominal and pelvic peritoneum, and omentum for anatomopathological study.

Follow-up and Results:

The biopsy results came back in favour of peritoneal tuberculosis and the patient was referred to the Tuberculosis and Lung Disease Control Unit.

DISCUSSION:

Peritoneal tuberculosis accounts for less than 5% of all forms of tuberculosis, and can develop anywhere in the abdominal cavity, especially in the peritoneum, omentum, intestines, liver, uterus and adnexa [3].
In terms of aetiology, peritoneal tuberculosis is often due to haematogenous dissemination from a primary pulmonary focus [4].
Given the post-menopausal context, this clinical case provides a perfect illustration of the diagnostic difficulties of peritoneal tuberculosis, which remains a curable pathology under antibiotic treatment, unlike ovarian cancer, which is not. Diagnosis, whether positive or differential, remains difficult to establish with imaging and biology, CA125 remains unspecific, culture of mycobacteria is difficult but can be envisaged on ascites fluid, and adenosine deaminase has excellent sensitivity and specificity (96% and 98% respectively).
The definitive diagnosis has been made on peritoneal biopsies with histological study [5] [6], but intra-operatively macroscopic aspects may raise suspicion of the diagnosis, particularly in the presence of whitish peritoneal nodules (76 to 100% of cases), between 0.5 and 2 mm in diameter, diffused over the peritoneum, and also by the presence of inflammation of the peritoneum and peritoneal adhesions [7].
As a result, the definitive diagnosis of peritoneal tuberculosis is still made during surgery, in particular by laparoscopy, which has a sensitivity and specificity of over 90% [8].
Treatment includes anti-tuberculosis chemotherapy with rigorous clinical and biological monitoring.

CONCLUSION:

Tuberculosis is still common in ALGERIA despite compulsory vaccination. Peritoneal tuberculosis is rare, and is difficult to diagnose because its clinical picture closely resembles peritoneal carcinosis. Only histological evidence can confirm the diagnosis, and it is here that laparoscopy retains a place of choice in the diagnosis through the per operative aspect and biopsies for histological study.

Conflicts of Interest:

The authors declare no conflicts of interest.

Authors' Contributions:

Lounas BENGHANEM: data collection, bibliographic research and writing of the article.
Bouzid ADDAD: proofreading and supervision of the writing of the article.
Lydia FAÏD: proofreading and supervision of the writing of the article.
Mounir BISKER: proofreading and supervision of the writing of the article.
Sofiane AISSAOUI: proofreading and supervision of the writing of the article.
Kamel HAÏL: proofreading and supervision of the writing of the article.

Figures

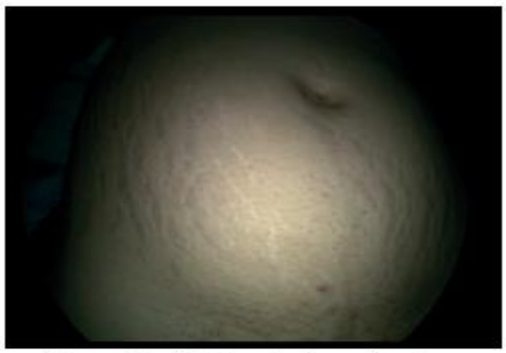

Figure 1 : Abdominal perimeter increased by ascites.

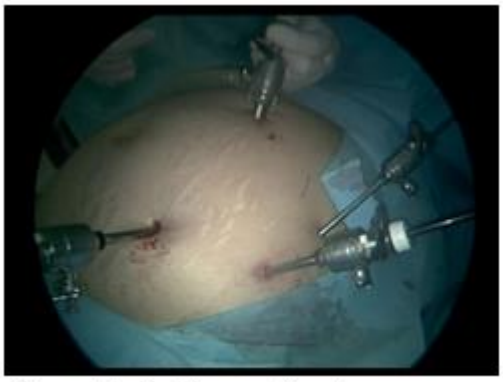

Figure 2 : Setting up the laparoscopy

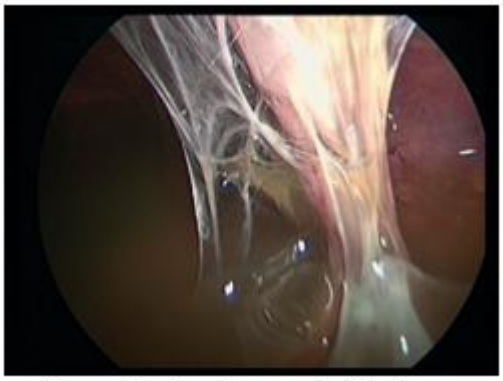

Figure 3 : Ascites and adhesions.

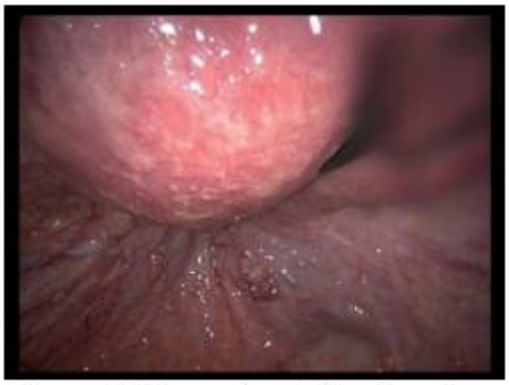

Figure 4 : Retraction of the Douglas and retroversion of the uterus.

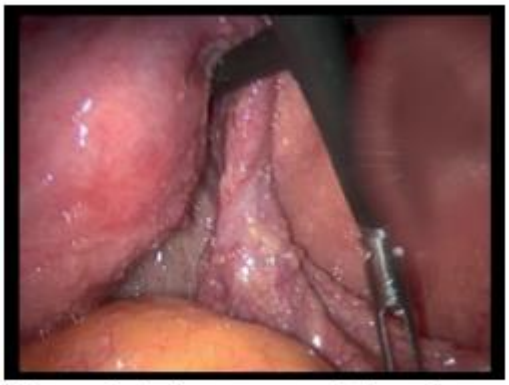

Figure 5 : Inflammatory right adnexa.

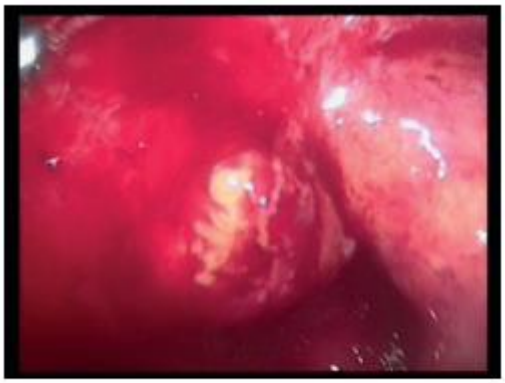

Figure 6 : More caseous.

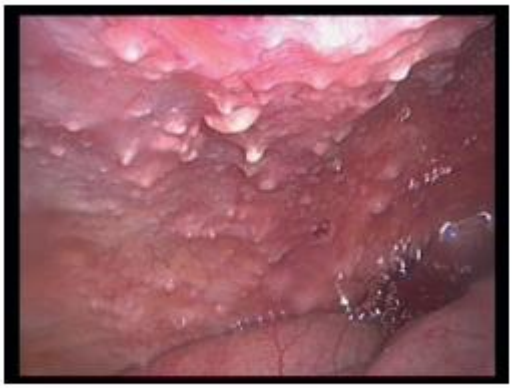

Figure 7 : Peritoneal implants.

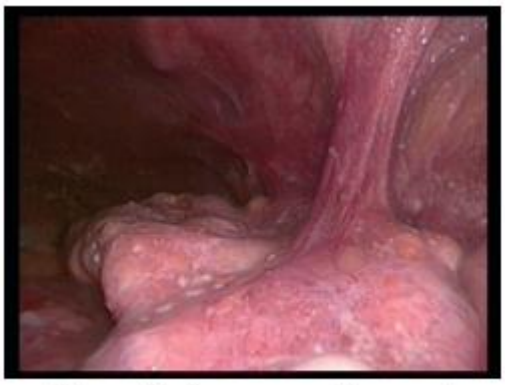

Figure 8 : Suspensory ligament of the liver.

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