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Case Report

A Rare Case of an Ovarian Tuberculosis with Ascites, Pleural and Pericarditis Effusion Mimicking a Metastatic Ovarian Cancer

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Abstract

Tuberculosis remains an endemic disease who is not evoqued in front of an ovarian mass with liquid effusions. We report to you the case of a 39-year-old woman who came with an ovarian bilateral mass, a pleural effusion, an ascites and a pericarditis in a context of deterioration of general condition. The main purpose of this clinical case is to make practitioners aware of this diagnosis in front of this clinical presentation to avoid radical treatments in the case of a positive tuberculosis.

Keywords: Ovarian mass, Ascites, Pleural effusion, Pericarditis, Liquid effusions, Tuberculosis

Introduction

Tuberculosis remains an endemic disease often sidelined in today's world even if it is a curable illness that is frequently not evoqued in front of an ovarian mass with liquid effusions. Indeed, it is a rare extra-pulmonary form which sometimes lead to diagnosis delay and therapeutic issues in women in reproductive age [1]. We report to you the first case of a young woman who came with an ovarian bilateral mass, an ascites, a pleural and a pericarditis effusion in a context of deterioration of general condition which appeared to be a tuberculosis.

Case Report

It is a 39-year-old housewife with a history of one pregnancy and one parity as well as a postpartum cranial anevrysm. She reports a notion of family tuberculosis contagion. On questioning, the patient reports a deterioration of her general.

Condition

a loss of 20kg over a period of 6 months (weight on admission=57kg). She also reports night sweats, chronic cough and yellowish leucorrhoea. On general examination, we find a conscious patient hemodynamically and respiratory stable. The patient is pale and presents a phthisical appearance. On clinical examination, right basal dullness is found with a diminution of vesicular murmurs and vocal vibrations, as well as heart sounds. There was also an abdominal dullness. There were no peripheral ganglia or fistulized lymphadenopathy. The remainder of the physical examination was unremarkable.

On laboratory examination, the patient presents an anemia at 9g/dl normochromic normocytic and a lymphopenia at 980 elements/mm^3. CRP was barely increased to 6.61mg/L. Since the diagnosis of neo-ovarian was raised, the CA-125 was requested. It was at 64.4U/mL. The TB-gold quantiFERON study came back positive. The HIV serology was negative.

On the Chest X-ray, there was a low abundance of a right pleural effusion which begins to encyst. (Figure 1A and 1B) In view of the strong suspicion of tuberculosis, a CT-Scan was requested to look for a pulmonary nodule or an opacity which tends to burrow. But this one only highlighted the pleural effusion. On pelvic MRI, we found a bilateral ovarian mass predominantly on the left, with ovaries increased in size (measuring 26mm by 24mm on the right and 46mm by 24mm on the left). (Figure 2 A, B, C and D) We also observed a heterogeneously contrasting with areas necrosis associated with ascites. (Figure 3 A and B).

Cardiac evaluation with 2-dimensional echocardiogram showed a pericarditis as well as fibrin deposits.

The acid-fast bacilli smear came back negative, as did the bronchial aspiration. Bronchial biopsies showed no granuloma. Given the strong history, clinical and biological suspicion of tuberculosis, the patient was referred for an exploratory laparoscopy for diagnostic purposes. At laparoscopy, adhesions were found surrounding

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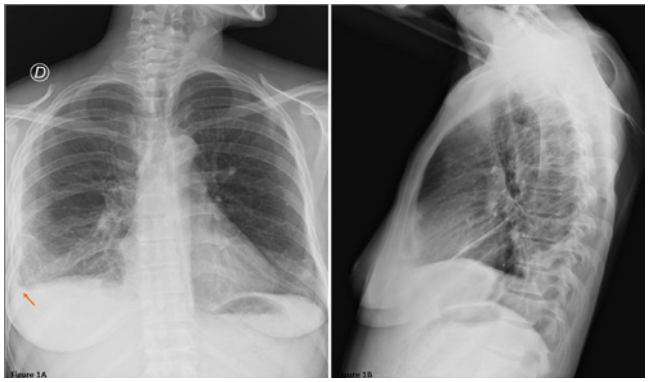

Figure 1: The Chest X-ray showing a low abundance of a right pleural effusion. **A:** A low abundance of a right pleural effusion visible on the Chest X-ray (orange arrow). **B:** A low abundance of a right pleural effusion which begins to encyst on the profile Chest X-ray.

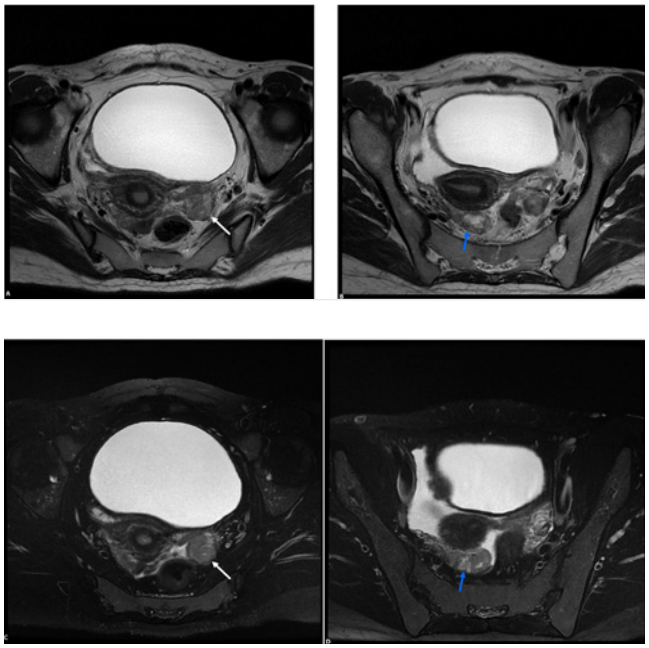

Figure 2: On pelvic MRI, bilateral ovarian mass was observed. **2A:** The left ovarian mass on the pelvic MRI on the axial T2-weighted sequence (white arrow). **B:** The right ovarian mass on the pelvic MRI on the axial T2-weighted sequence (blue arrow). **C:** The left ovarian mass on the pelvic MRI on the axial T2-weighted Fat-Saturation sequence (white arrow). **D:** The right ovarian mass on the pelvic MRI on the axial T2-weighted Fat-Saturation sequence (blue arrow).

the ovaries with an appearance of diffuse peritoneal malaria with peritoneal granulations and significant inflammation of the intestines with multiple adhesions. (Figure 4).

On anatomopathological examination of the fragments of the peritoneal and ovarian granulations, fibro-adipose tissue was found largely altered by granulomatous epithelioid and gigantocellular lesions centered very focally by a punctate necrotic material. (Figure 5 A and B).

The patient received an anti-bacillary treatment based on the combination of ethambutol, isoniazid, pyrazinamide and rifampicin.

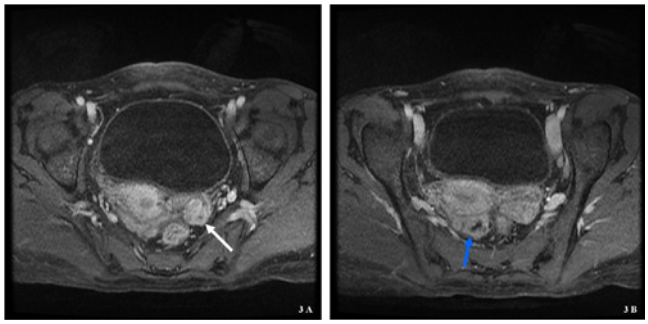

Figure 3: A heterogeneously contrasting with areas necrosis on the pelvic MRI with contrast. **A:** The left ovarian mass on the pelvic MRI on the axial C+ (white arrow). **B:** The right ovarian mass on the pelvic MRI on the axial C+ (blue arrow).

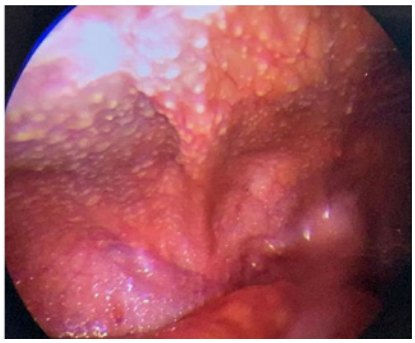

Figure 4: At laparoscopy, peritoneal granulations and significant inflammation adhesions were observed.

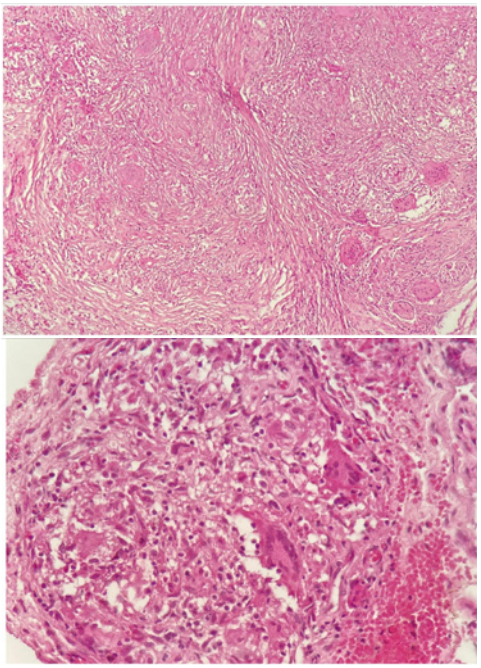

Figure 5: Anatomopathological examination showing granulomatous epithelioid and gigantocellular lesions centered very focally by a punctate necrotic material. **A:** Epithelioid inflammatory granuloma of variable size (HE, Gx100). **B:** Granulomas with numerous multinucleated giant cells (HE, Gx400).

She also received colchicine to prevent the establishment of a constrictive pericarditis. One month after the start of the treatment, the patient gained 10kg, a 17% gain from the intake weight.

Discussion

Tuberculosis remains an endemic disease. Indeed, it could take different forms. We report to you an exceptional form of tuberculosis. The patient came with an ovarian bilateral mass, a pleural effusion, an ascites and a pericarditis. In the literature, a bilateral ovarian tuberculosis with an ascites and/or a pleural effusion is the usual form mimicking an ovarian carcinoma [2,3]. But the association of the three effusions associated to an ovarian mass have never been described yet.

Unknowing this could lead to diagnosis delay and therapeutic issues as it is the case in developed country. Indeed, many young women had radical treatments such as hysterectomies and oophorectomies thinking that they had an ovarian carcinoma, and then discovered that it was an ovarian tuberculosis with effusions [1,4].

Furthermore, the CA-125 is not a specific reliable marker of neo-ovarian. Indeed, it is often elevated in case of an abdominal or pelvic tuberculosis [5,6]. It has reached once 1 081 U/ml in the case of a peritoneal tuberculosis [7].

Consequently, this endemic disease should be evoqued in front of an ovarian mass with liquid effusions and in front of the increase of the CA-125 to avoid radical treatments if the patients appeared to be having a tuberculosis.

Conclusion

The clinical presentation was made by an ovarian bilateral mass, a pleural effusion, an ascites and a pericarditis. The main purpose of this clinical case is to make practitioners aware of this diagnosis in front of this presentation to avoid radical treatments in the case of a positive tuberculosis.

Conflict of Interest

None.

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