

In Front of Bilateral Pseudo Tumoral Ovarian Mass: Think about Tuberculosis

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Abstract

Ovarian and peritoneal localizations of tuberculosis are rare. They raise the problem of differential diagnosis with malignancy. In this regard, we reported the case of a 25-year-old woman who presented with bilateral pseudo tumoral ovarian mass mimicking an advanced ovarian carcinoma with ascites. Extemporaneous examination of the peritoneum confirmed the diagnosis of tuberculosis and avoided bilateral annexectomy that could compromise the fertility of the patient.

Keywords

Ovarian Tuberculosis, Ovarian Carcinoma, CA 125, Fertility

1. Introduction

Genital tuberculosis is a particular location of extrapulmonary tuberculosis. The most common form is represented by chronic salpingitis. However, other locations have been reported involving the endometrium, cervix and vagina exceptionally [1]. Bilateral ovarian localization is rare. It seems useful to educate clinicians about this tuberculosis localization through this clinical case observed in our institution.

2. Observation

A 25-year-old woman without past medical history was admitted to our department for an alteration of the general state with a 10 kg weight loss lasting for 3 months in a context of fever. She also reported amenorrhea since 3 months and a gradual increase in abdominal volume. Clinical examination found a febrile patient at 38°C. The heart and lung auscultation were normal. The abdomen was distended related to ascites. The rest of her physical examination was unremarkable.

Laboratory findings on admission revealed a normal white cell count (6290/mm³). The erythrocyte sedimentation rate was elevated (75 mm). The C reactive protein was high (88.3 mg/L) and also the rate of serum fibrin (4.7

g/L). Renal and hepatic function tests were normal. The abdominopelvic CT scan showed a cystic mass of the right ovary measuring 5 cm in the greater axis and solido-cystic mass in the left ovary measuring 6 cm in the great axis. It was a great abundance ascite with thickening and nodular on the peritoneum measuring 12 mm (Figure 1). Furthermore, the chest X-Ray was normal. Acido-alcool-resistant bacillus on the sputum and tuberculin skin testing were negatives. The antigen CA125 levels were very high: 321 U/ml (normal < 30 U/ml). Abdominal celioscopy was performed and showed countless whitish nodules throughout the peritoneal cavity. Peritoneal biopsy was performed. The macroscopic specimen of biopsy measured 6/1 cm containing whitish nodules of 0.5 to 1 cm.

The extemporaneous study of the peritoneum was in favor tuberculosis confirming the presence of caseo follicular tuberculosis (Figure 2). Laparoscopy has not explored the pelvic area.

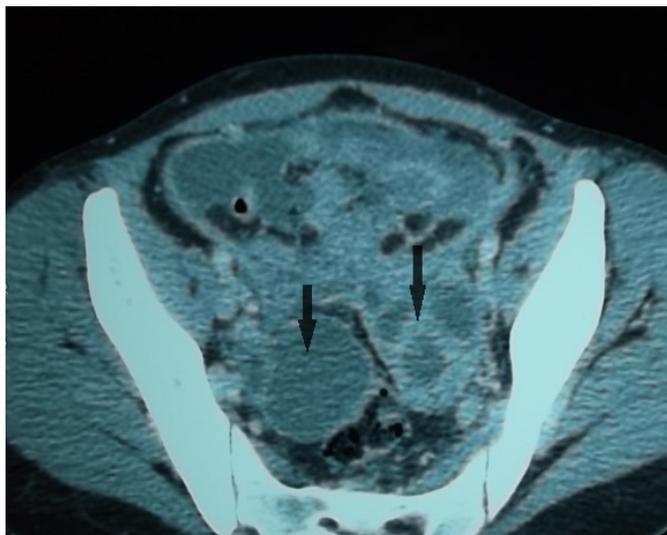


Figure 1. A cystic mass of the right ovary and solido-cystic mass in the left ovary. The arrows shows the right and the left ovaries with cystic mass of the right ovary and solido-cystic mass in the left ovary.

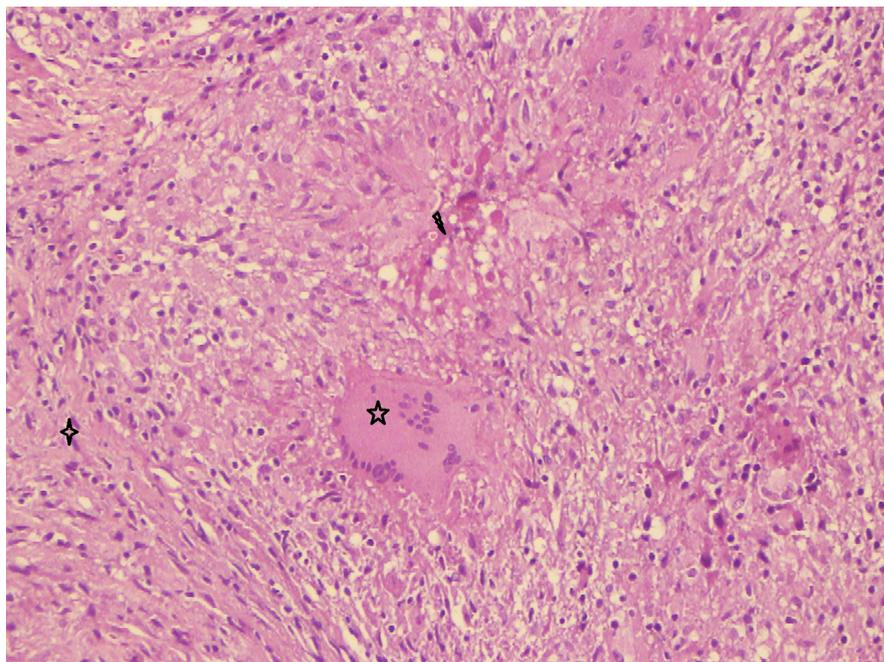


Figure 2. Epithelioid (*) and giant (☆) cells with caseum (↘).

The patient received a quadruple anti-Tuberculosis treatment: HZRE (isoniazid, pyrazinamide, rifampicin and ethambutol) protocol for 2 months and RH (isoniazid, rifampicin) for 4 months.

The evolving was good and we noted the disappearance of the ovarian mass and the resumption of menstrual cycles after 6 months of treatment. Finally the diagnosis of bifocal tuberculosis involving the ovaries and the peritoneum was retained retrospectively after improvement under treatment.

3. Discussion

As shown in our observation, the pseudo tumoral form of genital tuberculosis mainly affects young women between 20 and 30 years [2]. In our case, the spread of TB to the peritoneum has probably made by contiguity from the ovarian lesions.

The literature review of similar cases showed as in our case, the difficulty to differentiate between ovarian tuberculosis and advanced ovarian cancer, based on clinical, biological and imaging findings before surgical investigation [3]-[8].

Pelvic MRI is the best way to further characterize an ovarian mass. However, the distinction between neoplastic and tuberculosis remains difficult [3].

The elevation of CA 125 levels is usually observed in 90% of advanced ovarian cancer. However, this rise remains non-specific as it can be observed in various circumstances such as pregnancy, ovarian cysts, uterine cancer, colon, lung and pancreatic cancer ... [9]. The association of tuberculosis and high levels of CA125 has been reported in the literature, and its decrease might be a good marker for an appropriate response after anti-tuberculosis treatment [2] [10].

Pathological examination is the best way to confirm the right diagnosis. However, this option is not without drawbacks because of the risk of infertility that could follow bilateral oophorectomy [11]. In our young patient, extemporaneous examination of the peritoneum avoided the realization of a more invasive procedure in order to conserve her fertility. Indeed, this diagnosis was made retrospectively and the patient preserved her ovaries.

The duration of treatment of the genital tract tuberculosis is the same as pulmonary tuberculosis, for 6 months [12].

4. Conclusions

Peritoneal and ovarian tuberculosis can clinically and radiologically simulate malignancy. But, in front of pseudo-tumoral ovarian mass in a young woman, we must think about tuberculosis.

Considering the curability of this serious infectious disease, it would be interesting to use more accessible bacteriological samples in order to avoid more invasive procedures.

Conflict of Interest

None.

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