

Abdominopelvic tuberculosis mimicking malignant ovarian tumor

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CASE REPORT

A 32-year-old woman was referred to the Gynecologic Oncology service with history of abdominal pain and weight loss of 10Kg in the last six months. An ultrasound performed a few days before had shown enlarged ovaries, ascites and omental and peritoneum thickening. CA125 level was 1986IU/mL (N<200IU/mL).

Considering the diagnosis of ovarian and peritoneal cancer, an exploratory laparotomy was performed. During surgery, there was no evidence of ovarian tumor, instead, diffuse nodules, edema and significant hyperemia were seen in the uterus, tubes, peritoneum and omentum (Figures 1 and 2). Intra-operative frozen section consultation showed a chronic granulomatous inflammatory process, with giant multinucleated cells. After tissue and peritoneal fluid samples collection, the abdomen was closed without any other intervention. Both, ascitic fluid Adenosine Deaminase levels and histopathological tissue analysis were suggestive of tuberculosis (Figure 3).

Staining methods searching for Alcohol and Acid Fast Bacilli and for fungi were negative (Figures 4 and 5). The patient was treated for tuberculosis with complete symptoms recovery.



Figure 1: Nodules, edema and hyperemia of uterus and tubes.

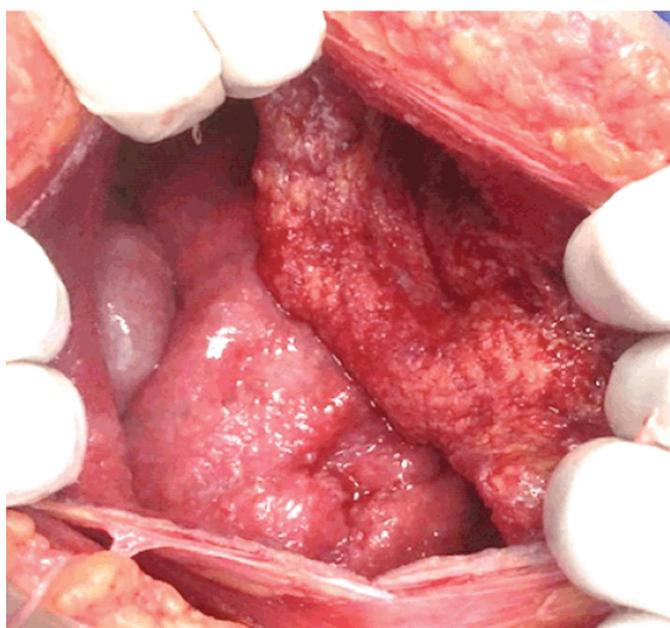


Figure 2: Diffuse nodules in omentum surface.

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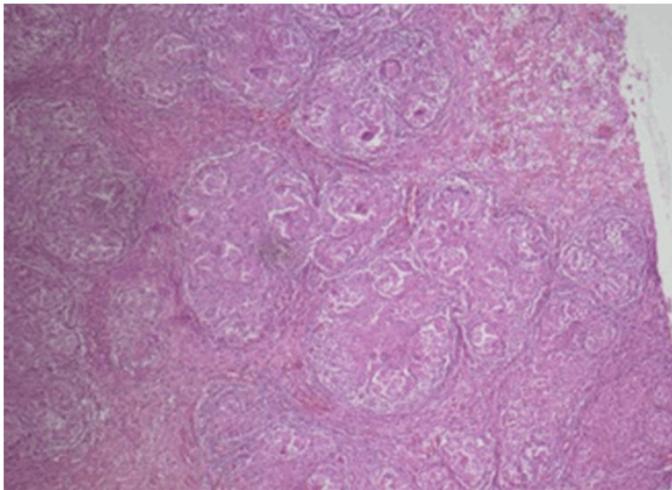


Figure 3: Chronic granulomatous inflammatory process with Langhans type multinucleated giant cells, magnification 10X.

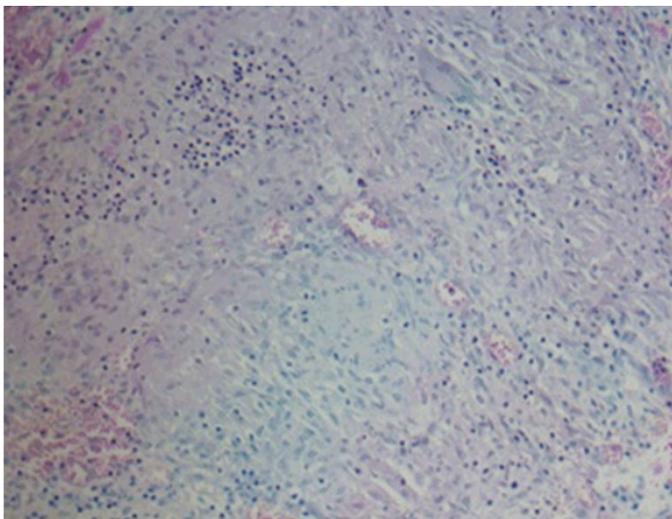


Figure 4: Special staining (Fite-Faraco) negative for Alcohol and acid fast bacilli, magnification 40X.

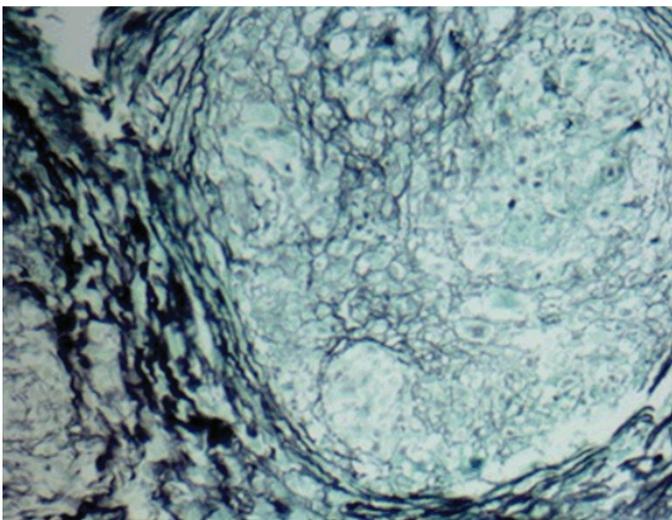


Figure 5: Special staining (Grocott) negative for fungi, magnification 40X.

DISCUSSION

The presentation of abdomino-pelvic tuberculosis simulating advanced ovarian cancer has been consistently reported in the literature [1-3], as the finding of pelvic masses, ascites and increased levels of CA 125 is common in both entities. Since the response to treatment and survival rates is totally different in the two conditions, differential diagnosis is especially important [3].

In women with echographic suspicion of an ovarian mass, a systematic analysis of signs indicative of malignancy has recently been proposed [4] and its use is expected to reduce false-positive results caused by inflammatory and infectious diseases, such as tuberculosis. When surgical intervention is necessary, the laparoscopic approach has advantages over open surgery and allows the obtaining of tissue and peritoneal fluid samples for analysis. In cases in which the diagnostic doubt arises during surgery, freezing biopsy is a priceless tool to avoid unnecessary bilateral oophorectomy.

CONCLUSION

Tuberculosis is an infectious disease with rare involvement of the genital tract, with the power to mimic other gynecological diseases, including malignant tumors. The diagnosis must combine a high index of suspicion with clinical evaluation and appropriate histopathological and microbiological investigation. If this diagnosis is suspected, it can spare patients from unnecessary surgeries.

Keywords: Ascites, Inflammatory disease, Ovarian cancer, Pelvic tuberculosis

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Author Contributions

Amanda da Mota Silveira Rodrigues – Substantial contributions to conception and design, Acquisition of data, Analysis and interpretation of data, Drafting the article, Revising it critically for important intellectual content, Final approval of the version to be published
 Alberto Carlos Moreno Zaconeta – Substantial contributions to conception and design, Acquisition of data, Analysis and interpretation of data, Drafting the article, Revising it critically for important intellectual content, Final approval of the version to be published
 Maria de Fátima Brito Vogt – Substantial contributions to conception and design, Acquisition of data, Analysis

and interpretation of data, Drafting the article, Revising it critically for important intellectual content, Final approval of the version to be published
 Laura Cardoso Vasconcelos – Substantial contributions to conception and design, Acquisition of data, Analysis and interpretation of data, Drafting the article, Revising it critically for important intellectual content, Final approval of the version to be published

Guarantor of Submission

The corresponding author is the guarantor of submission.

Source of Support

None

Consent Statement

Written informed consent was obtained from the patient for publication of this study.

Conflict of Interest

Authors declare no conflict of interest.

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