



RESEARCH ARTICLE

ENDOMETRIAL TUBERCULOSIS: REPORT OF A CASE AND LITERATURE REVIEW.

Karich Nassira, Miry Achraf And Bennani Amal.

Pathology department, Mohammed VI university hospital, Oujda, Morocco.

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Abstract

Background: Post-menopausal tuberculosis of the female genital tract is a rare condition that has gotten generally little consideration in the literature although it is still frequent in developing nations where cases are not diagnosed nor treated.

Case presentation: In this work we report an uncommon case of endometrial tuberculosis in a 63 years old woman. Ultrasonography has revealed a large intra-uterine mass which was highly suspicious of malignancy. An endometrial biopsy revealed endometrial mucosa with multiple granulomas with caseating necrosis. The patient after the finding was put under antituberculous chemotherapy for six months.

Conclusion: vaginal discharge presented in postmenopausal women must raise attention on the possibility of a genital TB especially in endemic countries.

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Introduction:

Tuberculosis (TB) is a multisystemic infection that can practically affect any organ or tissue. Genital involvement by TB is an essential cause of secondary amenorrhea and infertility in developing nations where tuberculosis is endemic [1]. It occurs most of the time secondary to pulmonary TB, by the haematogenous course occurring in 5 to 13% of patients with pulmonary TB [2]. A sexual transmission could however explain the many cases of the disease in the genital tract with no pulmonary involvement.

The endometrium and the fallopian tubes are the commonest sites, yet any part of genital tract can be affected. In roughly 50 to 60% of women with genital TB, the endometrium is involved [3]. After menopause, TB of the endometrium is possible although it is an uncommon possibility, since the tissue vascularity is diminished [4]. We present a case of endometrial TB clinically revealed by postmenopausal vaginal discharge and at the imaging level by an intra-uterine mass which was highly suspicious of malignancy.

Case report:

Our patient is a postmenopausal 63-year-old woman, gravida 4 para 4, with no significant medical personal or family history. She was menopausal for 2 years, with no significant medical history and presented with vaginal discharge since one month. Our patient presented without pelvic pain, fever or loss of weight. Physical examination detected left pleural effusion and ascites. The speculum examination which showed a healthy vagina has revealed some purulent discharge from the cervix.

A Pap smear revealed atrophy and inflammation with no tumor cells.

Corresponding Author:-Karich Nassira.

Address:-Pathology department, Mohammed VI university hospital, Oujda, Morocco.

Trans-abdominal pelvic ultrasound was performed and showed an anteverted uterus with an intra uterine lesion of 41x38 mm of size of tissular echogenicity and which appeared adherent to the uterine wall and vascular at the doppler examination (Figure 1). These findings were highly suggestive of a malignant nature of the lesion.

A CT-scan revealed the left pleural effusion, the ascites and showed a bilateral salpingitis, but could not give more detailed informations about the lesion.

A pelvic MRI was performed, and showed a suspicious intrauterine mass since it enhances less than normal endometrium which appeared invaded by the mass.

An endometrial biopsy was performed which showed epithelioid cell and Langerhans giant cells granulomas with central caseating necrosis (Figure 2-3).

All hematological and biochemical investigations were normal.

A chest X-ray showed no evidence of pulmonary tuberculosis. The patient is actually receiving antituberculosis chemotherapy (isoniazid, rifampicin, ethambutol, and pyrazinamide) and showed already a good clinical evolution.

Discussion and conclusions:-

Every year, TB causes about 3 million deaths worldwide [5]. Genital TB is the second most common extrapulmonary manifestation of TB and is more common among females than in males. But still, its real frequency is obscure [6]. It is however more frequent in developing nations where TB is still endemic.

Genital TB without contamination of the respiratory tract remains to a great degree uncommon although documented through direct transmission between sexual partners [7]. Genital TB is usually diagnosed during the active period of life whereas it is rare in the postmenopausal period [8]. Postmenopausal women are often misdiagnosed since they do not present any symptoms or present with non-specific ones such as vaginal bleeding or vaginal discharge. In our case, the patient presented irregular yellowish vaginal discharge.

Tuberculosis endometritis can be either acute or chronic [9]. Irregularity of the contour of the endometrial cavity is the main abnormality of acute endometritis, while chronic endometritis is characterized by fibrosis, and calcification [10].

Chest X - ray may show a lesion suggestive of TB or it can be also totally normal since more than 75% of women with genital TB had a normal chest-X ray film as documented in a study led by Saracoglu and colleagues [11].

Features on hysterosalpingogram include a distorted contour of the uterine cavity due to scarring, venous and lymphatic intravasation or synechiae with well-demarcated borders [12]

Hysteroscopy can allow visualisation of granulomas in cases of granulomatous endometritis. [13]

Ultrasonography shows a heterogeneous appearance of the endometrium with the presence of hyperechogenic areas that represent foci of calcification or fibrosis

Findings on CT scan are not specific, and may classically include a Thickening and enhancement of the uterine wall. MRI better demonstrates changes such as uterine adhesions, hydrosalpinx, and tubo-ovarian abscess.

Pathological findings of granulomatous inflammation that was discovered also in our patient, with the presence of many caseating epithelioid granulomas as in our case. PCR, as depicted in many investigations, is a more sensitive and specific test.

Anti-tuberculous drugs are used to treat endometrial tuberculosis. A regimen consisting of isoniazid, ethambutol, rifampicin and pyrazinamide is used for the first two months, followed by dual therapy. The total duration of treatment should be six months to a year with excellent cure rates. [14,15].

In any case, vaginal discharge presented in postmenopausal women must raise attention on the possibility of a genital TB especially in endemic countries. Because of the high TB incidence in our country just like in any other endemic country, clinicians have to suspect TB when confronted with vaginal discharge in a patient of postmenopausal age. In our case, endometrial tuberculosis was revealed clinically by chronic vaginal discharge, and in imaging by an intrauterine mass which was highly suspicious for malignancy. Endometrial biopsy was our key diagnostic tool since it has showed typical caseating granulomas.

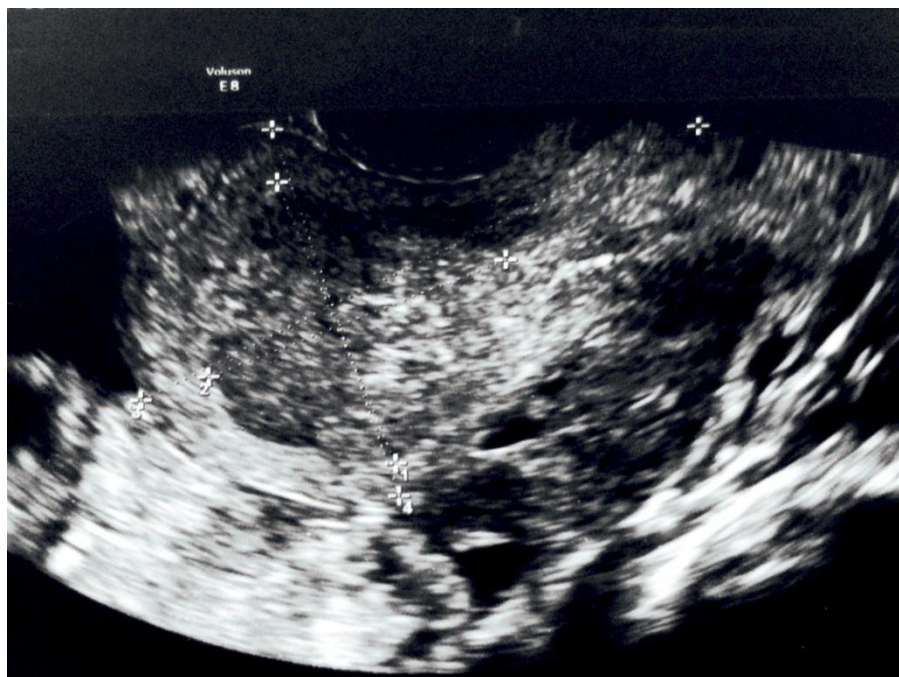


Figure 1:-ultrasound view showing the intra uterine lesion of 41x38mm of size

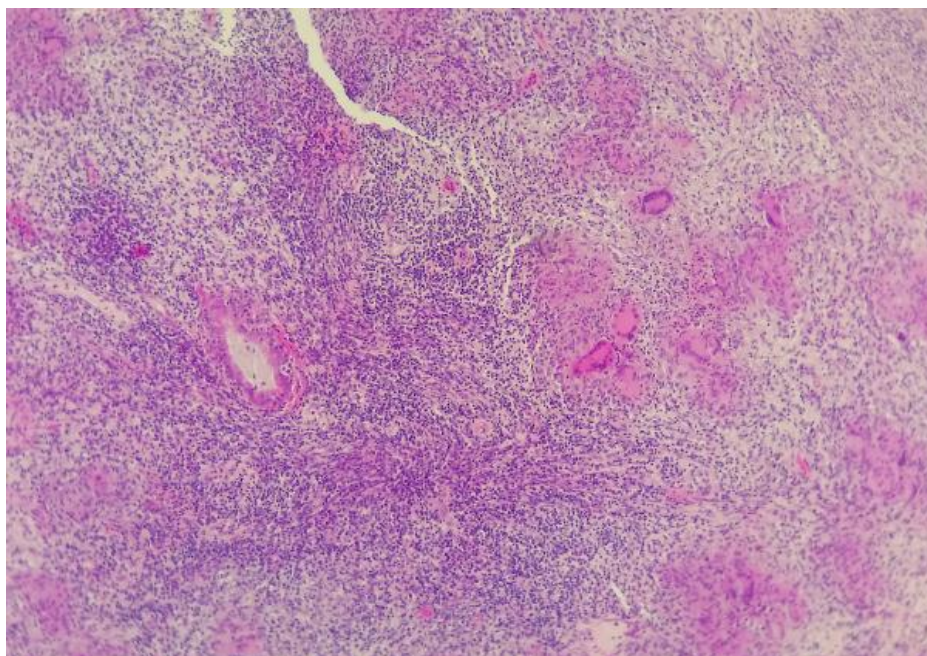


Figure 2:-Low magnification showing an epithelioid and giant cell granuloma in the endometrial mucosa

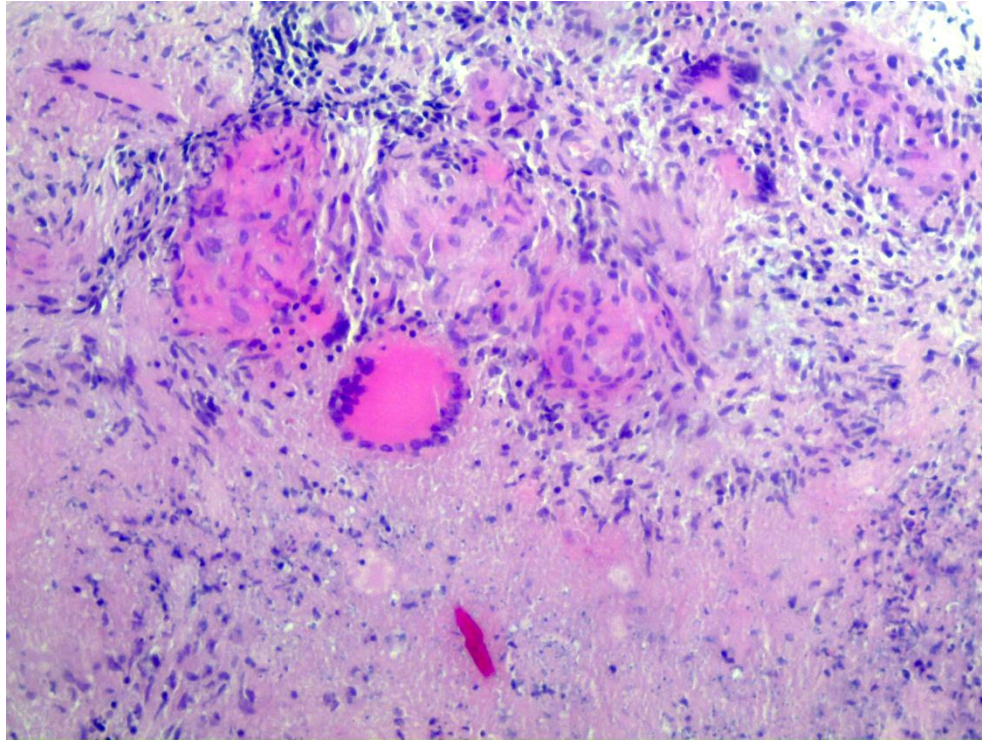


Figure 3:-high magnification showing an epithelioid and giant cell granuloma in the endometrial mucosa

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