



TUBERCULOUS ENDOMETRITIS IN A POST-MENOPAUSAL LADY MIMICKING PERITONEAL MALIGNANCY

Gynaecology

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ABSTRACT

Tuberculous endometritis in postmenopausal women is a rare entity. Genital tuberculosis has an indolent course and often remains undiagnosed owing to non-specific symptoms, such as lower abdominal discomfort and abnormal vaginal discharge. We herein report a case of postmenopausal lady who presented mainly as peritoneal malignancy but turned out to be a case of tubercular endometritis.

KEYWORDS

Genital tuberculosis, Postmenopausal, Anti-tubercular therapy, Endometrial biopsy, diffuse peritoneal disease.

INTRODUCTION-

Genital tuberculosis (TB) is a global health problem. Five to 13% of patients with pulmonary TB develop genital infection.¹ Although most of the affected women are of reproductive age, the disease can be rarely seen in postmenopausal women.² Genital tuberculosis after menopause is rare most likely due to decreased vascularity of tissues hampering mycobacterium growth.³ Genital tuberculosis has an indolent course and often remains undiagnosed mainly because of its asymptomatic nature or presence of non-specific symptoms, such as lower abdominal discomfort and abnormal vaginal discharge. We herein describe a case of postmenopausal lady who presented mainly as peritoneal malignancy but turned out to be a case of tubercular endometritis.

Case report

A 48-year-old postmenopausal woman presented to our outpatient department with a history of abdominal distension, anorexia and weight loss for the past three months. There was no history of postmenopausal bleeding or discharge per vaginum. Her bladder and bowel habits were normal. Menopause had occurred at the age of 46 years. She was thin built with a weight of 40 Kilograms. Per abdominal examination revealed distended abdomen with an ill-defined soft, lobulated cylindrical mass (15X10 Cm) in the infraumbilical region suspicious of dilated bowel loops. (Figure 1). Per speculum findings revealed healthy cervix and vagina. Bimanual examination suggested normal uterine size with no adnexal mass. Biochemically, her hemoglobin was 10 g/dL, total white cells were 14000 per cmm³ with lymphocytes of 75%. CA 125 was 85 U/L.

Her chest X-ray was normal. Ultrasonography showed that the uterus was of normal size but with copper T in situ. CT scan abdomen and pelvis showed a suspicious ill-defined wall thickening of small bowel loops with multiple periserosal soft tissue deposits with omental thickening. There were multiple enlarged mesenteric lymph nodes largest being of size 18 x20 mm. Few enlarged lymph nodes were also seen in epicardial fat pad largest measuring 21X 16 mm. Few of them showed central necrosis. Uterus was normal size with copper T in situ. Dilated serpiginous tubular structure measuring about 1 cm in diameter were seen in bilateral adnexa. CT findings were suspicious of diffuse peritoneal disease. Neoplastic? Tuberculosis. FNAC from mesenteric lymph nodes was inconclusive. Pipelle endometrial biopsy revealed tubercular endometritis. Endometrial aspirate showed

numerous Langhans giant cells with few epithelioid granulomas. (Figure 2). Polymerase chain reaction (PCR) for *Mycobacterium tuberculosis* was positive in the endometrial tissue samples.

She was started on Anti tubercular therapy (DOTS category 1) and is responding well.

DISCUSSION-

Tuberculosis is an important health issue, more so in developing countries owing to inadequate health facilities. Primary genital TB is rare and is almost always seen secondary to tuberculous infection elsewhere in the body. The fallopian tubes are most commonly involved in Genital TB in the form of congestion, hydrosalpinx, pyosalpinx, miliary tubercles, beaded tubes and tubo-ovarian masses.^{3,4} Endometrium and ovaries are involved in 50-80% and 20-30 % cases respectively. Less commonly it involves cervix, vulva and vagina.

Genital Tb often remains asymptomatic and may manifest years after the primary infection. It is mainly disease of young females often detected during infertility workups. Infertility is the most common presentation of female genital TB due to involvement of the tubes (damaged and blocked tubes), endometrium (nonreceptive and intrauterine adhesions due to Asherman's syndrome) and ovaries (ovarian reserve diminishes).^{4,7} Other less common presentations of genital TB involves ascites, tubo ovarian masses, abdominal mass and distension.⁸

Postmenopausal tuberculosis of the endometrium is very rare. It usually presents with postmenopausal bleeding but it can often be asymptomatic also which often results in delayed diagnosis and late therapeutic interventions. Hence a high index of suspicion is necessary for its diagnosis specially whenever there is presence of diffuse peritoneal disease or tubo ovarian masses. Low incidence of this disease in post-menopausal age is probably due to the fact that atrophic endometrium represents a poor milieu for mycobacterial growth.⁹

Diagnosis of Genital TB requires a thorough systematic clinical examination along with high degree of suspicion and involvement of intensive investigations.¹⁰ Genital TB occasionally mimics pelvic and peritoneal malignancies. So whenever there is presence of ascites and pelvic mass with miliary peritoneal seedlings in imaging, it is prudent to consider TB in differential diagnosis so as to prevent unnecessary

surgery. The Mantoux test (tuberculin skin test) has a sensitivity of 55% and specificity of 80% in female genital TB¹¹. Diagnosis is confirmed through biopsy of premenstrual endometrial tissue or demonstration of tubercle bacilli in culture of menstrual blood or endometrial curetting's. Typical lesions in genital TB are epithelioid cell granulomas with or without Langerhans giant cells. Caseation necrosis is a late feature.¹²

In our case, there was no ascites and CT scan findings were suggestive of mainly diffuse peritoneal disease. FNAC of mesenteric node was inconclusive for malignancy. Though there was no apparent pelvic pathology but in view of her dilated tubes, raised lymphocytes and positive Mantoux test, we decided to go ahead with endometrial sampling which later proved tuberculous endometritis.

Genital TB falls in category 1 of being seriously ill extra pulmonary disease. Once diagnosed and registered under DOTS, a full 6-month course pack box is booked for patient in the DOTS center. A fixed drug combi packs (FDC) of isoniazid, rifampicin, pyrazinamide and ethambutol is given thrice a week for first 2 months (intensive phase) under direct observation followed by a combination blister pack of isoniazid and rifampicin thrice a week for the next 4 months (continuation phase).⁴

CONCLUSION-

Postmenopausal tubercular endometritis often remains asymptomatic and even if it is not common in postmenopausal women, it should be considered in differential diagnosis of diffuse peritoneal disease.

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Figure 1- showing distended abdomen

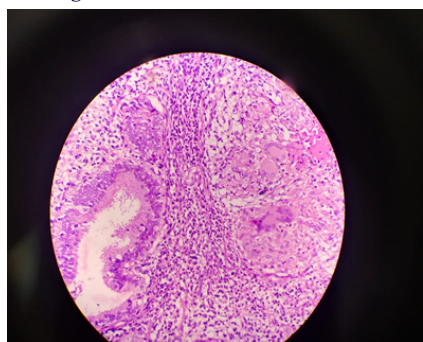


Figure 2- Section from endometrial aspirate shows epithelioid cell granuloma with langhans type of giant cells infiltrating the endometrial stroma and gland

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