

**CASE REPORT**

# Cervical Tuberculosis Mimicking Cervical Malignancy

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## INTRODUCTION

Genitourinary tuberculosis accounts for 5 percent of all female genital tract infections and out of that 10 percent are secondary to pulmonary tuberculosis. A diagnosis of genital tract tuberculosis has profound implications for the women seeking fertility. The diagnostic dilemma arises due to varied clinical manifestations and a battery of serological and bacteriological tests available.

## CASE HISTORY

A 36 years old patient presented to us with a history of primary infertility and secondary amenorrhea since 2 years and post-coital spotting per vaginum since 3 months. There was no history of any foul smelling discharge per vaginum, or any urinary problems. Her past menstrual cycles were regular, moderate and painless and she had amenorrhea since 2 years. There was no past history of tuberculosis and no history of contact.

On examination, general condition was good. Systemic examination, did not reveal any respiratory pathology and cardiac status was normal. Per abdomen examination was normal. Per speculum examination (Fig. 1), cervical erosion on the anterior lip of the cervix was noticed, and a growth on the posterior cervical lip which bled on touch. On per vaginal examination, the uterus was bulky, fornices were clear. On per rectal examination both parametria were free.

*Investigations done as follows:* Complete blood count - Hemoglobin 10.9 gm/dl, total WBC count  $8560 \times 10^3$  platelet count 3.24 lacs, ESR was normal. Her chest X-ray was normal and HIV status was negative. Total proteins were normal and liver and renal functions were normal.

A pelvic ultrasound (Fig. 2) was done which was suggestive of bulky uterus and a collection within the uterine cavity.

A dilatation and curettage with cervical biopsy was done for this patient. On D and C, a liquefied cheesy material was



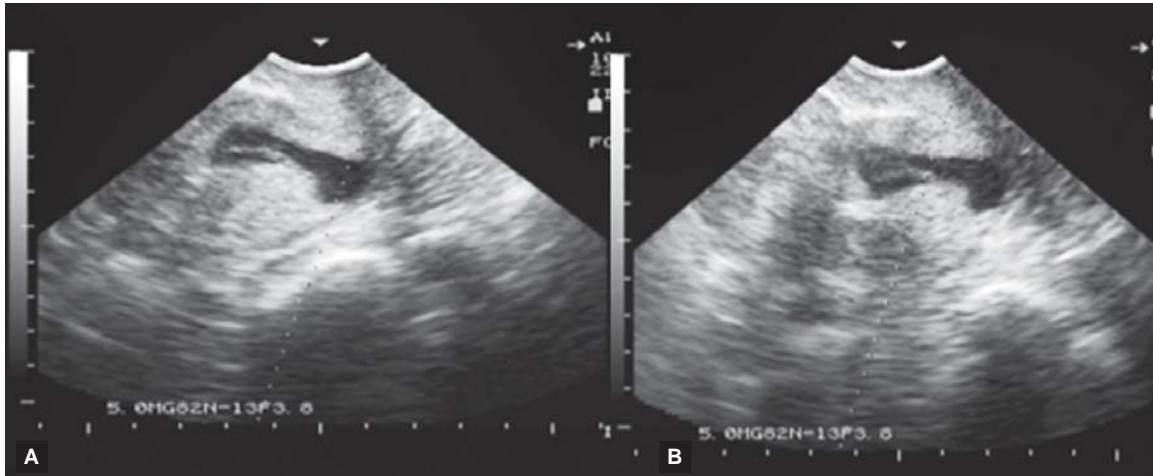
**Fig. 1:** Per speculum view-showing posterior cervical growth

evacuated from the uterus and the histopathology report (Fig. 3) was suggestive of tuberculous endocervicitis.

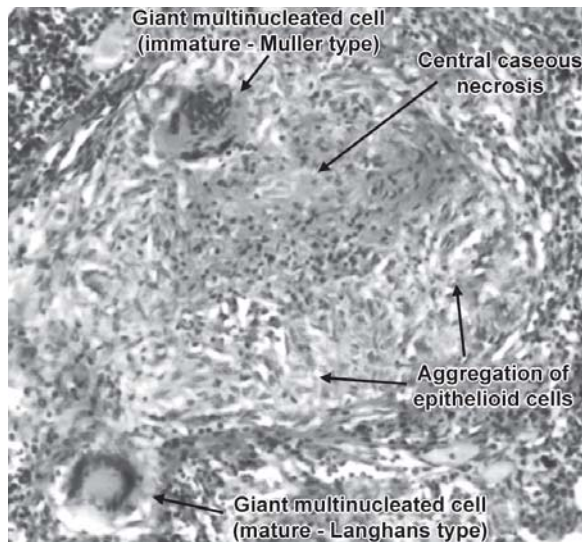
Treatment given to her included multidrug therapy beginning with the standard 4 drug regime for 2 months followed by 2 drugs for 6 months.

## DISCUSSION

The most common route of spread of tuberculosis is hematogenous and the fallopian tubes are involved in 100 percent, endometrium in 50 percent, ovaries in 20 percent, cervix in 5 percent and vagina and vulva in less than 1 percent. Direct inoculation of the tubercle bacilli can also take place over vulva and vagina during sexual intercourse with a partner suffering from tuberculous lesions of the genital tract.



**Figs 2A and B:** Ultrasound findings suggestive of intrauterine collection



**Fig. 3:** Histological picture of tuberculous granuloma

Cervical tuberculosis is rare. Tuberculous lesions of the cervix are either ulcerative or exophytic and can resemble a primary cervical malignancy or granuloma inguinale of the cervix.<sup>1,3</sup> Most common symptoms of pelvic tuberculosis are pelvic pain, menstrual irregularity and infertility. Some patients may be asymptomatic. However most of the patients present with scanty menses or amenorrhea. The menstrual dysfunction is usually due to endometrial caseation. Infertility can also be attributed to the associated tubal blockade.<sup>2</sup>

The key to diagnosis is a high index of suspicion. A past history of tuberculosis or history of contact may be absent. The Mantoux test and ESR are nonspecific. A hysterosalpingogram may help in some cases where the typical calcification, rigid lead pipe tubes with beaded appearance or hydrosalpinx and adhesions may be seen.

Histopathological examination of the endometrium and a biopsy from the site are the specific investigations of choice which are the cornerstone to the diagnosis.<sup>2</sup> The best time to examine the endometrium is premenstrual so, that the tubercles have maximum growth. The classic features are caseation necrosis, giant cells, epithelioid cells and lymphocytic infiltration.

The drug therapy is standard treatment which includes four drugs for 2 months (Isoniazid, Rifampicin, Pyrazinamide and Ethambutol) and then later 2 drug therapy (Isoniazid, Rifampicin)

Surgical treatment in form of total abdominal hysterectomy with bilateral salpingo-oophorectomy would be indicated when there is persistent pelvic mass or positive endometrial culture or histology and recurrence of pain or bleeding after 9 months of therapy. However, due to the efficacy of these chemotherapeutic agents surgical option is rarely required for any patient.

The chance of pregnancy in females suffering from genital tuberculosis is poor (5%), even after completion of treatment and out of them only 2% carry the pregnancy till term. *In vitro* fertilization has provided a ray of hope to these infertile patients.<sup>4</sup>

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