## Case Report

# A case of Genital Tuberculosis

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## Introduction:

Tuberculosis is a chronic disease with variable presentation. Genital TB is one from of extra pulmonary TB. In infertility patients, incidence of female genital TB (FGTB) varies from 3-26% in India. Similarly, incidence of FGTB is also very high in women seeking ART. There has been 5-fold increase in overall incidence of TB in countries with high prevalence of HIV.[1] The causative organism is mycobacterium tuberculosis of human type. Genital TB is almost always secondary to primary infection.[2] In about 50% cases infection originates from lung & the pelvic organs are involved by hematogenous spread. The infection remains dormant for a variable period of time of 4-6 years.[2] The fallopian tubes are affected in almost 100% of cases followed by the endometrium in 50%, ovaries in 20%, Cervix in 5%, and vagina & vulva in less than 1%.[1] Clinical symptoms can be variable. Infertility seems in 60% cases due to pathology in endometrium & fallopian tubes & a blockage of ovam transport. Other symptoms include pelvic pain which often accompanies associated with tubo-ovarian mass. Menstrual disorders like scanty menstruation & amenorrhea which are the usual presentation.[1]

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## Case report:

Mrs. Marjida, 27 years old, married, school teacher, admitted in the Diabetes Association Medical college and hospital with the complaints of inability to conceive for 8 years, pain in the lower back and pain during coitus for 6 months. Regarding her menstrual cycle, she had dysmenorrhea. Her menstrual cycle was prolonged (40–60 days interval) with scanty flow. She was married for 9 years. Her family members, nor her husband were suffering from any chronic illness like TB, asthma, HTN etc. She is a known case of PCOD (Polycystic Ovarian Syndrome) since 2021. On her abdominal examination shows tenderness present on her left iliac fossa and deep palpation. On per-vaginal examination uterus was found normal in size but there was a small adnexal mass felt through the left fornix. Her ultra sonogram shows both ovaries are enlarged with smaller follicles suggestive of PCOD. Her Hysterosalpingogram on 2021 shows left sided hydrosalphynx with normal right fallopian tube and there is free spillage of dye into the peritoneum.

Her other investigations & her husband semen analysis shows no abnormality. Her laparoscopy was done and chromo perturbation with diagnostic curettage was done and endometrial sampling sent for histopathology & routine microscopy examination. On her laparoscopy, adhesions present between left ovary, fallopian tube with large gut adhesionolysis was done. Both fallopian tubes are block with no free spillage of dye from both fimbriae. Cornual block present on right sided fallopian tube.

Her histopathology report shows granulomatous inflammation histologically consistent with TB. Then she treated with 4FDC 4-tablet for 4 months & then 2FDC 4 tablet for 2 months. She also supplementary supplemented by Tab. pyridoxine hydrochloride orally to prevent neuropathy.

## Discussion:

Genital TB is a chronic infectious disease which causes significant morbidity in the reproductive health of a woman.[3] It is always challenging for a clinician to diagnose female genital tract TB (FGTB) as a result of its wide spectrum of signs & symptoms.

The global prevalence of genital TB is estimated approximately 8-10 million. Majority of studies from India subcontinent showed by samples like endometrial biopsy/ curettage, pelvic aspirated fluids, ovarian tissue biopsy, fluids samples from the pouch of douglas & menstrual blood have been used for diagnosis of FGTB.[4] In this patient, the diagnosis was made by endometrial sampling.

Genital tuberculosis is a significant female disease of morbidity in the reproductive health of a woman in many developing countries including Bangladesh. It always affects the fallopian tubes. So, treatment with anti-tubercular drugs is favorable for fertility only when tubal & endometrial damage is minimal.[5] In this case both tubal damage was prominent in laparoscopic findings.

In this patient the hysterosalpingogram (HSG) report showed no tubal abnormality which was dione in early

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stage, whereas in laparoscopy both tubes found blocked. In a study demonstrating the effect on genital TB on fertility, tubal abnormalities in 17 (95.2%) out of 21 patients.[3] The common abnormalities was bilateral tubal blockage.

The commonest symptom of genital TB is infertility. In a study it showed that women who had no symptom or previous history of TB or any sign of disease, diagnosis made by Ziehl-Neelsen staining & histological examination. Among the positive specimen 69% were menstrual fluid, 17% endometrial tissue & 26% pelvic fluid.[6] In this study the patient did not have any history of signs or symptoms or previous history of TB nor had any contact history. Her diagnosis was made by histological examination of endometrial sampling in her infertility work-up.

Mycobacterium bacilli affect the fallopian tubes after affecting the lung. It can cause inflammation at the site of infiltration. Caesious necrosis is the major cause of destruction of fallopian tube.[7]

Histology demonstrates the typical caseous granulomatous lesion with giant epithelial cells. Polymerase chain reaction(PCR) is about 85-96% sensitive to detect organism in clinical specimen. But it does not distinguish live from killed bacilli.[3]

## Conclusion

Genital tuberculosis is an infectious disease leading to substantial morbidity, including infertility. As it remains asymptomatic it is not easy to diagnose pre-operatively. Laparoscopy is necessary for early diagnosis of this disease and therefore improve the fertility outcome.

In developing countries like Bangladesh, in case of infertility, genital TB should be included in differential diagnosis & tissue biopsy should be sent for both Histopathology & microbiological investigations.

## References:


1. Konar H. Pelvic infection. Genital tuberculosis. DC Dutta, DC Dutta's Textbook of Gynecology, 8th Eddition, New delhi: Jaypee brothers medical publishers;2020.p.113-115.
2. Malhotra N et al.Genital Tuberculosis. Jeffcoate's principles of Gynaecology, 9th edition Vol 1. New Delhi,London,Panana:The health science publisher;2019.p.420-425.
3. Ahmed S, Shaha D R, Begum P, Akter T, Akter H, Female Genital Tuberculosis, Journal of Diabetic Association Medical College, Volume 3, Number1, January 2019, Page: 36-38, DOI: https://doi.org/10.70357/jdamc.2019.v0301.08.
4. Munne KR, Tandon D, Chauhan SL, Patil AD. Female genital tuberculosis in light of newer laboratory tests: A narrative review. Indian J Tuberc. 2020 Jan;67(1):112-120. doi: 10.1016/j.ijtb.2020.01.002. Epub 2020 Jan 18. PMID: 32192604.
5. Ishrat S, Fatima P. Genital tuberculosis in the infertile women - an update. Mymensingh Med J. 2015 Jan;24(1):215-20. PMID: 25725695.
6. Oosthuizen AP, Wessels PH, Hefer JN. Tuberculosis of the female genital tract in patients attending an infertility clinic. S Afr Med J. 1990 Jun 2;77(11):562-4. PMID: 2345881.
7. Lele R, Shrivastava D. A Case Report on Genital Tuberculosis. Cureus. 2022 Oct 21;14(10): e30548. doi: 10.7759/cureus.30548. PMID: 36415409; PMCID: PMC9676023.