

Female genital Tuberculosis in infertile women: a practical paradigm for management based on reproductive outcome on retrospective analysis of various subfertility therapies following anti-tubercular therapy

Rana Mondal¹, Neha Jaiswal¹, and Priya Bhave¹

¹Bansal Hospital

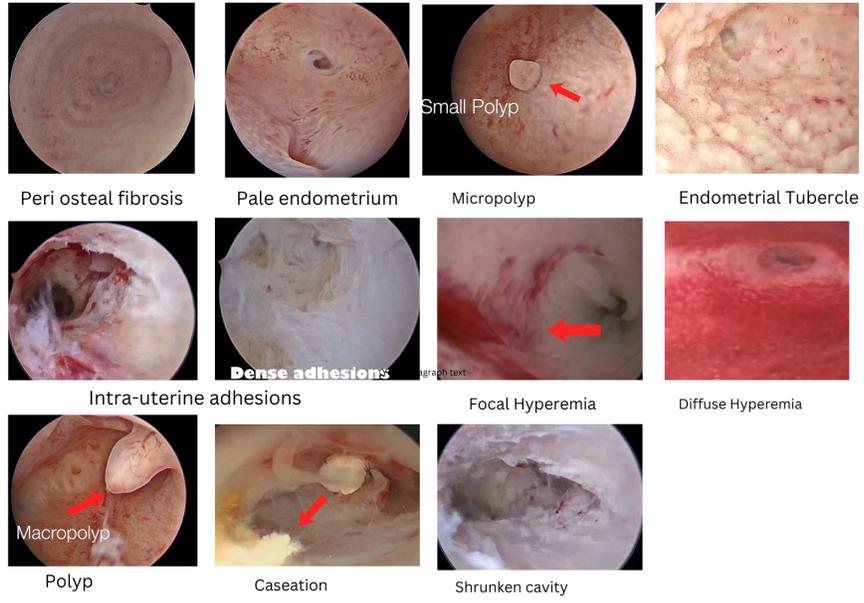
June 8, 2023

Abstract

Objectives To determine fertility outcomes after diagnosing genital tuberculosis followed by anti-tubercular therapy (ATT) and response to different subfertility treatment modalities. Hysteroscopy and laparoscopy data were also analysed to determine whether or not starting ATT early on in the course of tuberculosis treatment was more effective. **Study design** Among the infertile women, presented in department Reproductive Medicine in Bansal Hospital, Bhopal from Feb 2014 to June 2022, who underwent diagnostic hysteroscopy and laparoscopy, 1083 women having positive finding(s) suggestive of tuberculosis were received anti-tubercular therapy for at least six months. Retrospectively, we analysed the pregnancy outcome of these women after receiving anti-tubercular therapy followed by different subfertility treatments. **Results** In vitro fertilization (IVF) was a primary modality of treatment. 551(55.88%) women undergoing IVF with their oocytes resulted in 348(63.15%) clinical pregnancies, 264(47.91%) ongoing pregnancies, 84(15.24%) first-trimester miscarriages, and live birth in 246(44.64%) women. Clinical pregnancy rate, ongoing pregnancy rate, and live birth rate all show a statistically significant ($P = 0.039$) improvement when illness is diagnosed early through hystero-laparoscopy and treated with ATT, followed by fertility therapy. **Conclusions** Diagnostic hysteroscopy and laparoscopy may be performed to examine high-risk infertile individuals by analysing the reproductive system, including tubal factor. This helps choose a treatment strategy and forecast its success. This study shows that if ATT initiated at early stage as suggested by endoscopy findings IVF reproductive outcomes equivalent to the background population. Late-stage ATT results are often quite dismal, despite the fact that IVF and other adjuvant therapy may improve fertility.

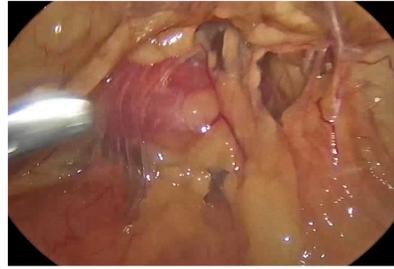
Hosted file

(MAIN) Reproductive outcome after different subfertility treatments in infertile women with female genital tuberculosis available at <https://aurea.com/users/502862/articles/648135-female-genital-tuberculosis-in-infertile-women-a-practical-paradigm-for-management-based-on-reproductive-outcome-on-retrospective-analysis-of-various-subfertility-therapies-following-anti-tubercular-therapy>





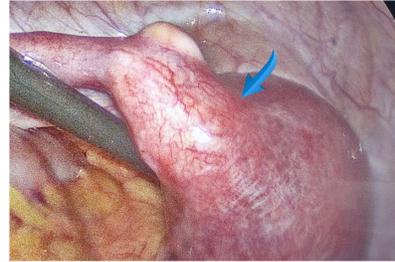
Peri-hepatic adhesions



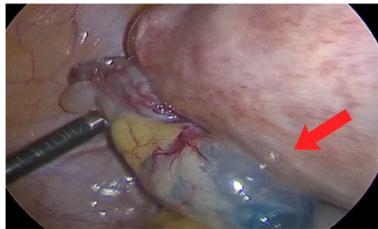
Abdomino-pelvic adhesions



Tubal diverticula with extravasation



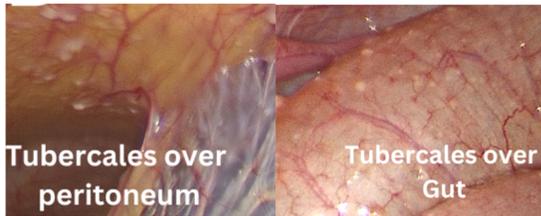
Thicken cornua



Encysted fluid collection



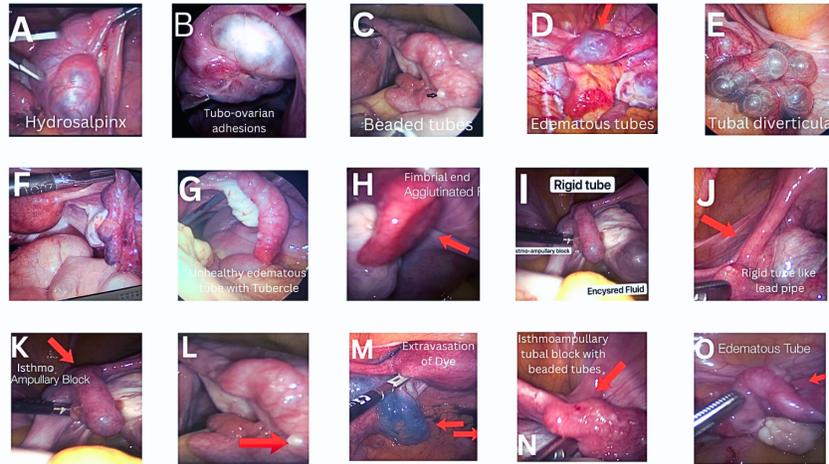
Tubo-ovarian mass



Tubercle



Caseous nodule



Hosted file

Fig 4 A practical paradigm approach in infertile women with female genital tuberculosis.docx available at <https://authorea.com/users/502862/articles/648135-female-genital-tuberculosis-in-infertile-women-a-practical-paradigm-for-management-based-on-reproductive-outcome-on-retrospective-analysis-of-various-subfertility-therapies-following-anti-tubercular-therapy>

Hosted file

Table 1 consort for reproductive outcome after ATT.docx available at <https://authorea.com/users/502862/articles/648135-female-genital-tuberculosis-in-infertile-women-a-practical-paradigm-for-management-based-on-reproductive-outcome-on-retrospective-analysis-of-various-subfertility-therapies-following-anti-tubercular-therapy>

Hosted file

Table 2 Hysteroscopic and laparoscopic findings seen in study population.docx available at <https://authorea.com/users/502862/articles/648135-female-genital-tuberculosis-in-infertile-women-a-practical-paradigm-for-management-based-on-reproductive-outcome-on-retrospective-analysis-of-various-subfertility-therapies-following-anti-tubercular-therapy>

Hosted file

Table 3 comparison between different subfertility treatment and reproductive outcome.docx available at <https://authorea.com/users/502862/articles/648135-female-genital-tuberculosis-in-infertile-women-a-practical-paradigm-for-management-based-on-reproductive-outcome-on-retrospective-analysis-of-various-subfertility-therapies-following-anti-tubercular-therapy>

Hosted file

Table 4 Hysteroscopic and laparoscopic findings suggestive of different stages of tuberculosis.docx available at <https://authorea.com/users/502862/articles/648135-female-genital-tuberculosis-in-infertile-women-a-practical-paradigm-for-management-based-on-reproductive-outcome-on-retrospective-analysis-of-various-subfertility-therapies-following-anti-tubercular-therapy>