

## INTRODUCTION:

- Genital Tuberculosis (GTB) is one of the causes of infertility, especially in developing countries.
- GTB not only causes tubal obstruction but also causes impairment of implantation due to the involvement of endometrium. However, GTB incidence is underreported due to the latency of the organism, asymptomatic, and a typical presentation in the majority of the cases and lack of accurate diagnostic modality.
- The study aimed to detect endometrial GTB in infertile women using PCR techniques.

## METHODS:

- A prospective study conducted in a tertiary care hospital catering the medical facilities to the population of Central Railways in Mumbai, India(2013-2015).
- 60 Patients with a history of primary or secondary infertility in the age group of 20-40 undergoing tubal patency tests (HSG-hysterosalpingography)/laparoscopy as a part of infertility-workup were included.
- Endometrial biopsy samples were tested for Tuberculosis by PCR and histopathology.

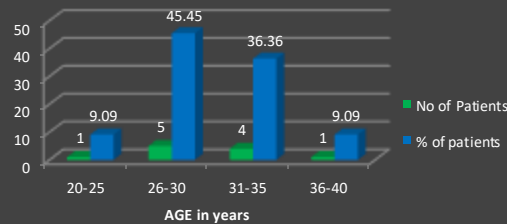
## RESULTS:

- Using Real-time TB-PCR 18.33% infertile women, found to be positive for genital tuberculosis and histopathology results were negative in all the patients.
- The correlation of HSG findings with TB-PCR positivity in these women was significant.
- All these women received anti-tubercular treatment. More than one third (36%) conceived over 2 years follow up.

## DISCUSSION:

- Our study shows that genital tuberculosis affects women in relatively young age group which constituted 53.45 % cases .
- In the present study it was observed that 7 out of 10 cases presented with primary infertility and 3 out of 10 cases presented with secondary infertility.
- In our study majority of the participants had normal menstrual cycle (81.82%), while hypo-menorrhoea was the most common menstrual abnormality present in 18.18% cases.
- In the diagnosis of endometrial TB, a high degree of suspicion was aided by, characteristics features on HSG.
- Our results show that PCR-based detection of M. tuberculosis in endometrial biopsy specimens is a sensitive technique for detecting genital tuberculosis, a leading cause of infertility in developing countries

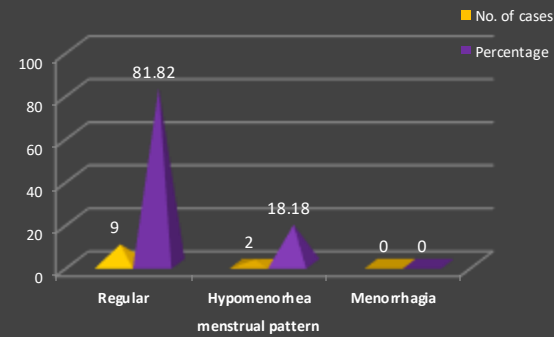
Age wise distribution in GTB positive patients



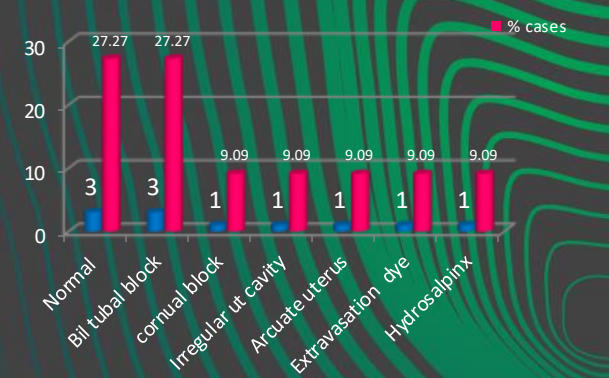
Type of infertility in GTB patients



Menstrual pattern in GTB patients



HSG finding in GTB patients



## CONCLUSION:

Our study suggests that GTB should be evaluated as a cause of infertility, particularly in high-risk populations. TB- PCR is a useful method in diagnosing early GTB. As the present study is a sample-based study and not population study, the above findings will need to be further explored in larger cohorts.

Follow up of GTB Post Treatment



Total no. of cases	60
No. of cases positive for genital tuberculosis	11
No. of cases negative for genital tuberculosis	49