

637: The effect of Genital TB in Indian women on Endometrial Receptivity Status

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Objective

Chronic Endometritis (CE) is a frequent cause of implantation failure. In India, the most common cause of CE is Genital Tuberculosis (TB). The aim of this study was to determine if there was a higher incidence of a non receptive endometrium by Endometrial Receptivity Analysis (ERA) in women with a past or present history of Genital TB. The secondary objective was to show if there was a difference in pregnancy rates of women with past or present history of Genital TB among the receptive and non receptive status groups.

Design

Retrospective observational study in Indian women visiting our Fertility Centre.

Materials and Methods

Over a 2 year period, 273 women of Indian ethnicity visiting our fertility clinic with a high suspicion for Genital TB underwent the ERA test for endometrial receptivity. Criteria for the diagnosis of Genital TB were one or more of the following. Blood test for Gamma Interferon, ESR, Mantoux test, Endometrial Biopsy for TB PCR, Histopathology, TB culture and Immunohistochemistry, Laparoscopy, Hysteroscopy and Ultrasonography. The endometrial receptivity status was diagnosed by the Endometrium Receptivity Analysis (ERA) test using the Next Generation Sequencing (NGS) platform.

Results

Of the 273 women, 91 (33%) had a nonreceptive endometrium and 182 (67%) had a receptive endometrium. Of the 182 women with receptive endometrium 67 (37%) had a history of TB, Latent TB or Active TB. Out of 91 women with nonreceptive endometrium 53 (58%) had a history of TB, Latent TB or Active TB. Of these 53 women with nonreceptive status 52 (98%) had a prereceptive endometrium and only 1 (2%) had a post receptive endometrium. Out of the 120 women with history of TB, Latent TB or Active TB, 53 (44%) were non receptive.

Conclusions

Our study found a higher incidence of nonreceptive prereceptive endometrium in those affected by Genital TB. This may be explained by the destruction of the progesterone receptors in the functional epithelium of the endometrium due to its atrophy apoptosis of cells and fibrosis.

Support

None

Disclosure

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