LATENT GENITAL TUBERCULOSIS ADVERSELY AFFECTS OVARIAN RESERVE: A PILOT STUDY

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Background: It is now understood that subclinical (latent) genital tuberculosis (TB) without clinical evidence of TB has a negative impact on fertility by affecting endometrium. However, it is not known whether latent infection has detrimental effect on ovarian reserve.

Aim: To evaluate whether latent genital tuberculosis has any effect on ovarian reserve in women with infertility.

Materials and methods: A case-control study of women with primary unexplained infertility was performed during Jan 2010 – Jun 2011 with IRB approval and written informed consent from patients. Women with unexplained infertility without laparohysteroscopic evidence of TB, having subclinical infection as confirmed by DNA PCR for Mycobacterium Tuberculosis in endometrial sampling were matched for age and BMI with women having primary unexplained infertility without evidence of infection. The ovarian reserve was assessed in both groups by day 3 serum FSH, AMH and AFC.

Results: 45 infertile women between the ages of 25 – 37yrs with unexplained infertility showed presence of latent genital TB. The ovarian reserve markers in these women were compared with age and BMI matched controls without evidence of latent infection. Significantly low AMH levels were noted in study group compared to control group at all age groups studied. A non-significant reduction in AFC was noted in study group compared to control. No such difference was noted in the FSH values among the two groups.

Conclusions: This pilot study despite the limitations of small numbers, raises the possibility of genital TB even in latent phase, having a negative impact on the ovarian reserve.

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