ABSTRACT

Background: Antral follicle count (AFC) has been labeled as the most accurate biomarker to assess female fecundity. Unfortunately, no baseline Indian data exists, and we continue using surrogate values from the Western literature (inferred from studies on women, grossly different than Indian women in morphology and genetic makeup).

Aims:
(1) To establish the role of AFC as a function of ovarian reserve in fertility-proven and in subfertile Indian women
(2) To establish baseline cut-off AFC values for Indian women

Settings and Design: case-control study.

Materials and Methods: Thirty patients undergoing workup for infertility were included and compared to equal number of controls (women with proven fertility). The basal ovarian volume and AFC were measured by endovaginal USG the relevant clinical data and AFC, ovarian volume were charted for every patient.

Statistical Analysis Used: SPSS platform was used to perform the ROC curve and intergroup variations are determined by chi-square test and correlation regression analysis was done

Results: Regression analysis revealed the highest correlation of AFC and age in fertile and infertile patients with difference in mean AFC of both the groups. Comparison of the data recorded for cases and controls showed no significant difference in the mean ovarian volume.
**Conclusions:** AFC has the closest association with chronological age in normal and infertile Indian women. The same is lower in infertile women than in matched controls. Baseline and cut-off values in south Indian women are lower than that mentioned in the Western literature.

**Key words:** Antral follicle count, infertility, ovarian reserve, ovarian volume