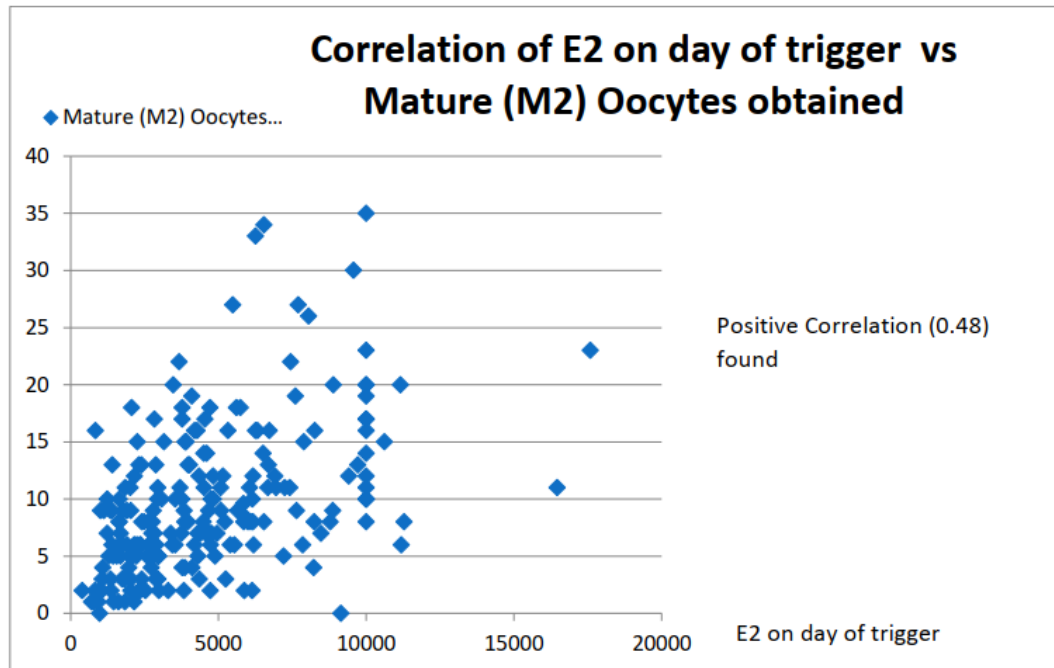


### **Purpose:**

To assess the role of total serum estradiol on the day of injection HCG (trigger) and it's correlation to mature follicle (M2) obtained

**Methods:** A retrospective observational study, inclusion being all patients who underwent IVF cycles in our institute over 6 months.



**Results:** 218 IVF cycles from our database studied, having maximal causes of infertility being tubal factor (34.2%) while 15 % having more than 1 factor. Mean age being 34 +/- 2 years. A positive correlation between E2 obtained on day of HCG trigger and M2 oocytes obtained (of 0.48) using Paerson's coefficient of variance test.

### **Discussions:**

- Studies by Sharara et al and Papageorgiou et al. in which 106 and 905 IVF cycles were studied, respectively, no detrimental effect of high estradiol was seen on oocytes/embryo quality or pregnancy rate.
- In this study, we correlate E2 on day of trigger to the M2 oocytes obtained which resulted in a positive correlation (0.48), which implies the testing of E2 can be a predictive factor for mature oocytes obtained. (M2)
- This is in accordance with a study by Malathi et al. in which a positive correlation was seen in OR, MO, and FO with E2/fol ratio. In this study, no difference in pregnancy rate was seen

**Conclusion:** Controversy exists about the benefit of measuring E2, our study highlights that it can be correlated to M2 obtained and hence useful for patient counselling.