THE RISK OF PREECLAMPSIA IN FROZEN THAWED EMBRYOTRANSFERS AMONG ASIAN POPULATION: ANALYSIS OF 1862 CASES CONCEIVED WITH ICSI.

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OBJECTIVE: To study the risk of preeclampsia(PE) in frozen thawed embryo transfer(FET) cycles compared to fresh embryo transfer(Fresh ET) cycles in different groups of patients-self and donor cycles,singleton and multiple gestations.

DESIGN: Retrospective analysis of 1862 women delivered after ICSI conception in our center from 2015 to 2017.

MATERIALS AND METHODS: The participants are women delivered with FET(n¼872) or fresh ET(n¼990) of self or donor gametes. Exclusion criteria: miscarriage < 20 weeks and chronic hypertension.Patients were followed up during pregnancy by direct consultation, telephonic call and discharge summary.Multiple risk factors have been documented: nulliparity, donor gamete conception, diabetes, obesity ,multiple gestation for PE. We analyzed if FET is an independent risk factor for PE or the risk is higher due to confounding factors.

RESULTS: Group 1: Self-cycles (SC) with singleton gestation (n¼1284). Incidence of PE in FET for singleton pregnancies in SC ¼ 4.4%(26/571). Incidence of PE in Fresh ET for singleton pregnancies in SC ¼ 1.9%(13/674). The RR¼ 2.3; P¼ 0.01. Group 2: SC with multiple gestation (n¼127) Incidence of PE in FET for multiple gestation in SC ¼ 8.8%(8/83). Incidence of PE in fresh ET for multiple gestation in SC ¼ 8.3%(3/33). The RR ¼ 1.05; P¼ 0.93. Group 3: Donor gamete cycles with singleton gestation (n¼352). Incidence of PE in FET for singleton gestation in donor cycle ¼ 7.7%(11/131). Incidence of PE in fresh ET for singleton gestation in donor cycle ¼ 4.3%(9/201). The RR¼ 1.8; P¼ 0.17. Group 4 : Donor gamete cycles with multiple gestation (n¼96) Incidence of PE in FET for multiple gestation in donor cycle ¼ 12.5%(5/35). Incidence of PE in fresh ET for multiple gestation in donor cycle ¼ 14.3%(8/48). RR¼0.87; P¼ 0.8. It was also observed that ,there is an increased incidence of PE in donor ET cycles (33/415¼7.9%) compared with SC (50/1364¼3.7%, RR¼2.08; P<0.0001). There is also increased incidence of PE in multiple gestation (24/199 ¼ 12.4%) compared to singleton gestation (59/1779 ¼ 3.6%, RR¼3.45; P< 0.0001). The patients were comparable with age group, parity, BMI, diabetes in fresh and frozen cycles.

CONCLUSIONS: In self cycles with singleton gestation there is increased risk of preeclampsia in FET compared with fresh ET cycles. In donor cycles and multiple gestations there were no increased risk of PE in FET compared with fresh ET cycles. In donor gamete
ET and multiple gestation, the risk for PE is higher than self cycles and singleton gestation, respectively. However, larger numbers are needed to ascertain the results. References: NA.