

## P90. Premature Ovarian insufficiency and thyroid Autoimmunity

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Context: Premature Ovarian insufficiency (POI) is a clinical syndrome defined by loss of ovarian function before the age of 40. Autoimmune disorders are more frequent in POI than in the general population. POI is associated most commonly with thyroid autoimmunity (14–27%).

Objective: Assessment of thyroid function and autoimmunity in our patients with POI.

Methods: Cross sectional study.

Patient(s): Patients with POI, who referred to infertility clinic of Royan Institute, Tehran, Iran, from January 2017 to October 2017 were included the study.

Intervention(s): No intervention.

Main Outcome: assessment of thyroid autoimmunity in our POI patients.

Measure(s):Baseline investigation in all patients with POI included karyotype, serum Follicle-stimulating hormone (FSH), luteinizing hormone (LH), Thyroid-Stimulating Hormone (TSH) and Anti-Thyroid peroxidase (AntiTPO) antibodies.

Result(s): From 40 women with POI, 32 (80%) had normal karyotype, mean age at first visit in our clinic was 31.45?5.02 years, mean of FSH and LH were 60.53? 39.10 IU/L and 32.02?20.23 IU/L respectively. Mean TSH and AntiTPO were 4.9?13.8 mU/L and 71.06?128.9 IU/mL .TSH in 17.5% patients were ?5 mU/L and AntiTPO in 27.5% of patients were ?30 IU/mL. We also compared TSH and AntiTPO between POI patients with normal and abnormal karyotype. Mean TSH , AntiTPO in normal karyotype POIs were 3.17?2.32 mU/L , 73.98?1.36 IU/mL and in abnormal karyotype were 2.91?2.23 mU/L , 54.60?6.48 IU/mL respectively. There was no statistically significant differences between AntiTPO in normal and abnormal karyotype.

Conclusions: It seems thyroid autoimmunity is one of the most common autoimmune disease associated with POI and it can be seen with same prevalence between normal and abnormal karyotype.

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