

## 9<sup>th</sup> Yazd International Congress and Student Award on Reproductive Medicine with 4<sup>th</sup> Congress of Reproductive Genetics

---

### Poster Presentations

---

**P-42**

#### **Circulating level of plasma Complement C1q/tumor necrosis factor-related protein 15 in polycystic ovary syndrome**

**Vatannejad A.**

*Department of Comparative Biosciences, Faculty of Veterinary Medicine, University of Tehran, Tehran, Iran.*

**Email:** vatannejad@ut.ac.ir

**Background:** Poly-cystic ovarian syndrome (PCOS) is one of the frequent metabolic and endocrine disorder in women population that has a close relation with parameters of metabolic syndrome and obesity. Studies have shown perturbation of adipokines levels in PCOS patients. Complement C1q/tumor necrosis factor-related protein 15 (CTRP15) is a prologue of adiponectin that indicated a close relation with insulin, glucose and lipids metabolism.

**Objective:** In the present study we sought to evaluate the levels of this adipokines and its relation with cardiometabomic data.

**Materials and Methods:** This case-control study carried out on 120 PCOS patients and 60 controls. Serum levels of adiponectin and CTRP15 were determined using ELISA technique.

**Results:** Serum levels of CTRP15 elevated in patients with PCOS compared to controls while adiponectin decreased considerably. In addition, CTRP15 indicated a relation with BMI, insulin resistance and FSH levels.

**Conclusion:** Elevated levels of CTRP15 could be a compensatory response in patients with PCOS in response to obesity and insulin resistance, however further studies are needed to dissect the possible underlying mechanism.

**Key words:** Polycystic ovary syndrome, Insulin resistance, CTRP15, Adiponectin.