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Poster Presentations

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

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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.