

# PLASMA LEVELS OF NESFATIN -1 IN PATIENTS WITH POLYCYSTIC OVARY SYNDROME

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**Aim:** Polycystic ovary syndrome (PCOS) is an important disorder in women of reproductive age which is characterised with menstrual dysfunction, anovulation and hyperandrogenism. 5-10% of the female population affected by this syndrome. Nesfatin-1 is a new anorexigenic hormone which is expressed from several regions of hypothalamus and peripheral tissues. Nesfatin-1 is related with obesity, insulin resistance and appetite. We aimed to evaluate the nesfatin-1 levels in patients with PCOS.

**Material and Methods:** Sixty-five patients (37 patients with PCOS and 28 healthy control subjects) were enrolled in the study. We included newly diagnosed patients with PCOS in our study. Diagnosis of PCOS was based on the 2003 ESHRE/ASRM diagnostic criteria.

**Results:** The patients with PCOS and controls were similar in terms of mean age, body mass index (BMI), waist/hip (W/H) ratio and homeostasis model assessment-insulin resistance (HOMA-IR) index. Plasma Nesfatin-1 levels were similar between groups. There was no correlation between plasma Nesfatin-1 levels and other parameters.

**Conclusion:** In conclusion, nesfatin-1 may play an important role in glucose metabolism and insulin resistance. In this study, due to the absence of insulin resistance in PCOS patients, levels of Nesfatin-1 were similar with the control group. Nesfatin levels were associated with glucose metabolism, but further studies are needed in this regard.