**Investigation of the relationship between AMH, IL18 and IL-6 with obesity and polycystic ovary syndrome in Iraq women infertility**

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|  **Abstract**In women of reproductive age, polycystic ovarian syndrome (PCOS) is a hormonal disorder that affects a considerable percentage of the population. Women who suffer from PCOS may have irregular or prolonged menstrual periods, as well as high levels of the male hormone testosterone (androgen) [1,2]. Several studies have shown that PCOS is associated with a pro-inflammatory state, and persistent low-grade inflammation is thought to be a significant factor to the pathogenesis of PCOS [3]. This study aims to study the study of AMH hormone and some immunological tests such as IL18 and IL-6 with obesity and its relationship to the occurrence of PCOS and infertility in Iraqi women and study the relationship between them. The study included 130 participants, and it was divided into three groups: group A and group B, which represent patients, and group C, which represent controls. The study indicated the importance of age for women with polycystic ovary disease. In the same study, weight had a strong direct effect on the development of the disease in women. AMH levels were not significantly affected, and it may be because women are taking too much treatment. Immunological markers had an effective role, as the levels of ILn-6 were significantly affected when the results were compared with the control group. When Pearson's test was performed, there was a correlation between the hormone anti-morin, weight, calcium, white blood cells, and blood platelets.Keywords: AMH, IL6, IL18, PCOs, Infertility |

**References**

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