**HORMONAL AND BIOCHEMICAL STUDY OF THE EFFECT OF**

**VITAMIN D ON POLYCYSTIC OVARIES IN WOMEN**

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| Polycystic ovary syndrome (PCOS) is a shared reason of ovarian dysfunction in women with anovulation. The main symptoms are branded by chronic anovulation, hyperandrogenism and/or the presence of ovarian cysts on ultrasound examination. Low levels of vitamin d3 exacerbate PCOS symptoms, including insulin resistance, ovulation, menstrual irregularities, infertility, hyperandrogenism, and obesity, and increase the risk of cardiovascular disease. In this study, we will try to find a relationship between PCOS and vitamin D deficiency in affected women. The study included (120) samples distributed into two groups, the patients group consisted of (80) samples and the control group consisted of (40) samples. Some chemical and hormonal tests were done such as VIT D3, TT, PRL, FSH, LH, TG, CHO, HDL, LDL, VLDL. We found low levels in Vitamin D , Follicle-Stimulating hormone , Cholesterol levle , High-density Lipoprotein ( HDL) level and Low-density Lipoprotein (LDL) level . also, We found high levels in Testosterone level , Prolactin level , Luteinizing hormone level , Triglyceride level and Very Low-density Lipoprotein (VLDL ) level |
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**References**

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