

Elshaer SS, Mohamed Anwar H, El-din Zohni MS. Relieving effect of metformin on hypothyroidism attendant polycystic ovary in rat model. *Bull. Pharm. Res.* 2015;5(2):42-6.

**Abstract:** Present investigation was undertaken to study the relieving effect of metformin on hypothyroidism attendant polycystic ovary in rat model. Fifty female Sprague-Dawley strain rats were divided into five groups (10 rats each): water control group, oil control group, dehydroepiandrosterone (DHEA) group, metformin group and DHEA + metformin group. Serum levels of total triiodothyronine (tT3), total thyroxine (tT4), thyrotropin (TSH), follicle stimulating hormone (FSH), luteinizing hormone (LH) and prolactin (PRL) were analyzed after 30 days of injection. DHEA group exhibited PCOS and hypothyroidism but significant amelioration was demonstrated in Met + DHEA group. It was concluded that metformin can relieve PCO and improve the thyroid gland functions.

**Key words:** Hypothyroidism, Polycystic ovary, Metformin, Dehydroepiandrosterone.

**References:** [21](#)

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**Cited by:** [00](#)

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