

THE ROLE OF METFORMIN IN INDUCTION OF OVULATION IN OBESE INFERTILE PATIENTS WITH POLYCYSTIC OVARY SYNDROME

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Abstract

This study aimed to find the effective method of induction of ovulation; in obese infertile patients with polycystic ovary syndrome. It is a prospective case-control study done at Infertility clinic of Basra Maternity and Child hospital.

Sixty obese, hirsute infertile patients for more than two years; with ultrasound findings of polycystic ovary syndrome, subjected to the following investigations: Serum LH, FSH, Testosterone, Prolactin & fasting blood sugar. All investigations were carried on early follicular phase of the cycle. Patients were divided randomly into two groups: Group A and group B. All patients received clomiphene citrate 50-150mg for five consecutive days beginning on day 5 of the cycle. The patients with group B also received 500mg of Metformin tablet three times daily for 6 months. Ovulation- which assessed by transvaginal folliculometry, and ovarian artery Doppler velocimetry; triggered with hCG when one or more follicle measuring ≥ 18 mm in diameter, and blood flow indices of the active ovary; showing the dominant follicles were good; on ultrasonic examination. Ovulation response and pregnancy rate were assessed in both groups.

Results obtained from this study pointed out the beneficial effect of Metformin on ovulation induction in obese hirsute women with PCOS.

It is concluded that PCOS remains an enigmatic disease. Once considered relatively benign, PCOS is implicated in medical disorders related to hyperinsulinism and hyperandrogenemia. Restoring fertility and treating abnormal hair growth remain important considerations in the physical and psychological health of reproductive-age women. Metformin has shown great promise in the treatment of insulin-resistant PCOS, but whether it would benefit all women who have PCOS remains unclear. Weight loss is the most important primary recommendation that can be made in the treatment of PCOS.