

## LAPAROSCOPIC OVARIAN DRILLING IN PCOS.

AYDIN BULENT ALP\*, METECI AHMET\*\*, BERBEROGLU METIN\*

*\*ITEM Advanced Medical Technologies and Training Center.*

*\*\*KARAMAN State Hospital Clinic of OB&GYN. TURKEY*

PCOS(Polycystic Ovarian Syndrome) is one of the most important etiologies of infertility. Laparoscopic ovarian drilling procedure can be applied as an adjunct to hormone treatment or as first line treatment. In a study group of 19 patients, we studied the hormonal and clinical variations in the patients following laparoscopic ovarian drilling. The serum levels of FSH, LH, Estradiol, free testosterone, DHEAS and androstenedion were measured on the day before the operation, on the first and the fifth postoperative days as well as in the 3<sup>rd</sup> and the 6<sup>th</sup> month postoperatively. The mean age of the patients were 27. 3 years. All the patients who were prepared for laparoscopy had serum testosterone levels above 3 pg/ml. The patients who were considered to have hyperandrogenism had also complaints clinically. LH levels were above 10 IU/L and the FSH/LH ratio was inverted. (>2)For the procedure of drilling cauter with monopolar needle tip was used. At least 20 punctures were made in each ovary. Serum FSH levels were elevated after the operation, whereas a gradual decrease was observed in LH levels. Following the operation, while testosterone levels decreased significantly, no significant changes were observed in levels of neither DHEAS nor Estradiol.

While spontaneous cycles started in the first sixth weeks in 17 of 19 patients. Sixteen patients experienced spontaneous ovulation in the 8 weeks following the operation. In 6 months period, 7 patients had spontaneous conceive without any medication.

Consequently, depending on the decrease in the ovarian volume and elimination of the hormonal support in the persistent follicular fluid, we detected significant reduction in the serum levels of testosterone and LH. We think that the endocrinological balance was established by the occurrence of ovulation and the rate of spontaneous ovulation was quite high. However we believe that the follow-up period is inadequate for answering the question of how long that established endocrinological equilibrium would last.