

Laparoscopic Ovarian Drilling for Polycystic Ovarian Syndrome in Clomiphene Citrate-Resistant Women with Anovulatory Infertility

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Objectives: To evaluate the efficacy of laparoscopic ovarian drilling in clomiphene citrate-resistant women with polycystic ovarian syndrome (PCOS), and to determine the factors affecting the pregnancy rate.

Design: Prospective study (Canadian Task Force classification II-2).

Setting: Tertiary referral teaching hospital.

Patients: One hundred ninety-eight women with clomiphene citrate-resistant PCOS.

Intervention: Laparoscopic ovarian drilling, all procedures were performed by the author over a four year period between June 1996 and June 2000, with follow-up for 2 years.

Main outcome measures: Ovulation and pregnancy rate.

Results: Follow-up data, which were available for 181 patients, showed a spontaneous ovulation rate of 70.1%, cumulative ovulation rate of 98.3%, and pregnancy rate of 84.5%. Women who conceived following surgery were obese, had higher pre-operative luteinizing hormone (LH) levels, were younger and were more likely to have typical ultrasonographic features of polycystic ovarian disease. Logistic multiple regression analysis showed that the pre-operative LH levels, body mass index (BMI) and the age of the patient were the main determinants of the outcome.

Conclusion: Our results demonstrate that laparoscopic ovarian drilling is an effective procedure in clomiphene-resistant anovulatory women with PCOS. The pregnancy rate in women with pre-operative LH levels of more than 10 IU/L, a BMI of ≥ 30 kg/m², with age ≤ 30 years reached 97.3%.