

Analysis of Laparoscopic and Transvaginal Ovarian Drilling on Polycystic Ovarian Syndrome: A Narrative Review of Outcomes

Mah Rukh Afzal

Allama Iqbal Medical College, Lahore, Pakistan

Abstract

The primary objective of Polycystic Ovarian Syndrome (PCOS) treatment is to achieve mono-ovulatory cycles, thereby enabling pregnancy and childbirth. Laparoscopic Ovarian Drilling (LOD) and Transvaginal Ovarian Drilling (TVOD) are widely used second-line treatments for ovulation induction in PCOS patients who do not respond to clomiphene citrate (CC). LOD involves the application of heat or laser energy to create small perforations in the ovary, whereas TVOD involves ultrasound-guided ovarian puncture. Both LOD and TVOD have been shown to be effective in promoting ovulation and enhancing fertility outcomes in PCOS patients. TVOD offers several potential advantages over LOD, including a lower risk of surgical complications, reduced cost, and the ability to be performed in an outpatient setting. Both LOD and TVOD are effective treatment options for PCOS-related infertility. The choice between the two procedures should be based on individual patient characteristics, including body mass index (BMI), hormonal profiles, and previous responses to treatment. Further research is needed to optimize these techniques and clarify their clinical applications. Patients with clomiphene-resistant PCOS should be carefully assessed for both LOD and TVOD. LOD may be more suitable for patients with elevated luteinizing hormone (LH) levels and shorter durations of infertility. In contrast, TVOD may be preferred for patients who would benefit from a less invasive approach with a lower risk of adhesion formation.