# INTRODUCTION

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Polycystic ovarian syndrome is the commonest problem in reproductive endocrinology but it remains a controversialist area ***(Hamiliton-Fairly and Pearce, 1993).***

The traditional definition of the syndrome of PCOS as originally described by ***Stein and Leventhal in 1935*** i.e., "obesity, ammenorrhea and hirsutism" represents only the extreme ends of spectrum of women having polycystic ovaries diagnosed by ultrasound. There's disagreement regarding the criteria used for diagnosis of the PCOS. In Britain, the diagnosis is usually made when more than 10 small follicles, less than 8 mm in diameter, are visualized in an ovary at the time of sonographic examination in a women with at least of one of the symptoms of PCOS "menstrual irregularity, infertility, or hyperandrogenism". In United States, the diagnosis is usually made by the presence of endocrinologic abnormalities of the syndrome; elevated serum LH and/or testosterone level's together with anovulation ***(Balen et al., 1995).*** Therefore, one needs to differentiate between the diagnosis of PCO and polycystic ovarian syndrome, in the latter signs of hyperandrogenism "such as hirshutism and/or elevated level of serum androgens" need to be present in addition to the morphologic finding of PCO. Thus clinicians should not make the diagnosis of polycystic ovarian syndrome or what some have called "hyperandrogenic chronic anovulation" solely on the ultrasonic finding of PCO because small cysts in the ovary are very common ***(Farquhar et al., 1994).***

The oldest treatment for anovulatory infertility associated with polycystic ovarian syndrome is bilateral ovarian wedge resection ***(Donesky and Adashi, 1995).*** However, it is associated with a high incidence of periadenxal adhesions (87%) that may jeopardize fertility ***(Naether, 1995).*** Because of this, as well as the availability of medical treatment for ovulation induction, ovarian wedge resection fell into disfavor ***(Naether, 1995).*** Clomiphene citrate is today the first line of treatment for anovulation. However, 25% of anovulatory women don't respond to clomiphene and only 40-50% of patient will conceive ***(Balen, 1997).*** Clomiphene non-responders may be treated with gonadotropins or pulsatile luteinizing hormone releasing hormone, but neither modality of treatment is universally successful because these therapy are expensive and is associated with ovarian hyperstimulation and high miscarriage rate ***(Balen, 1997).***

In 1984, ***Gjonnaess*** first reported treatment of PCOS by laparoscopic ovarian drilling, using a unipolar electrode at 300-400 watts for 2-4 seconds, he created 8 to 15 craters of 2-4 mm depth on the ovarian capsule of each ovary. This technique is less invasive than ovarian wedge resection by laparotomy, is associated with less adhesion formation and produces excellent results ***(Naether, 1995).*** One of the effects of ovarian drilling is reduction of ovarian volume and reduction of the stroma producing androgen ***(Farhi et al., 1995).***