

# ***INTRODUCTION***

Anovulation is a very common problem present in a variety of clinical manifestations, including amenorrhea, irregular menses and/or hirsutism. Serious consequences of chronic anovulation are infertility and a greater risk for developing carcinoma of the endometrium and the breast (Speroff et al., 1994).

Polycystic ovarian disease (PCOD) represents the common form of normogonadotropic anovulation associated with non cyclic gonadotropins and oestrogens, and in which oestrogen function is intact but cycle failure and androgen excess are evident (Kase et al., 1990).

Gross sclerocystic changes in the human ovary were clearly described by Chereau in 1845. More interest was aroused in 1935, when this anatomical abnormality was described by Stein and Leventhal to be a clinical syndrome consisting of menstrual irregularity featuring amenorrhoea, a history of sterility, masculine type hirsutism and obesity (Stein and Leventhal, 1935).

The diagnosis of this disorder relies mostly on the clinical presentation and hormonal profiles of the patient (Yen, 1980 - Goldzieher, 1981). Laparoscopy had been used to confirm the diagnosis (Rojanaskul et al., 1989).

The development of high resolution real-time ultrasound during the past decade led to the new approach for ovarian visualization (Huckeloer et al., 1979 - Nitscke-Debelstein, 1980). In contrast to Laparoscopy where only the external surface of the ovary could be seen, ultrasonic examination allow a direct visualization of the internal structure of the ovaries. It has now replaced Laparoscopy as the method for assessing the ovarian morphology in many clinical conditions (Rajanasakul et al., 1989).

Vaginal ultrasounds is now available and allows one to perform a much more precise analysis of internal ovarian morphology. As the probe can be brought closer to the ovaries than by abdominal ultrasound, higher ultrasound frequencies (5 to 7.5 MH) can be used yielding high resolution ovarian picture (Ardaens et al., 1991).