

INTRODUCTION

Study of the uterine cavity and the fallopian tubes is mandatory in many gynecological problems. Hysterosalpingography (HSG) is the most common investigation to visualize uterine cavity and to assess the tubal patency (**Friberg and Joergensen, 1994**). However, it is not a simple investigation due to exposure to radiation, the risk of reaction to contrast media and it is time consuming since in many cases patient should be re-examined by X-ray after 24 hours (**Mitri et al., 1991**).

Ultrasonography is widely used now with a high degree of reliability due to revolutionary improvement in its technology (**Schlieff and Deichert, 1991**). However, ultrasonography is still not the tool of choice for examining all pathological conditions of uterine cavity and in evaluation of tubal patency due to the homogeneity of the tubal cavity with the surrounding structures when examined ultrasonographically (**Balen et al., 1993**). So the use of the contrast media create a new acoustic interface which improve the quality of the ultrasound imaging (**Crequat et al., 1993**). This technique is considered a simple outpatient procedure

for assessing tubal patency and uterine abnormalities without exposing the patient to the risk of radiation (**Ayida et al., 1996**).

Randolph et al. (1986) reported the use of intrauterine saline and transabdominal ultrasound scanning to evaluate uterine abnormalities, the demonstration of free saline in the pouch of douglas indicated at least unilateral tubal patency, but direct visualization of saline flowing in the fallopian tube was not possible (**Mitri et al., 1991**). Sterile saline provides an echo-free or negative contrast medium which is sensitive for diagnosing uterine cavity pathology but it is an unreliable method for diagnosing tubal patency (**Bonilla et al., 1992**).

An echo-contrast medium designed for ultrasonographic use has become available (**Echovist - 200., Schering, Germany**). The contrast agent (Echovist-200) consists of a suspension of galactose microparticles in an aqueous 20% solution of galactose with concentration 200 mg of microparticles per 1 ml of suspension (**Schlieff, 1987**).

Echovist-200, by transcervical administration in combination with sonography makes it possible to develop a sonographic

method as an alternative to X-ray in the evaluation of tubal patency and delineation of uterine cavity of infertile women (Deichert et al., 1989).

The Echovist-200 is considered a positive contrast medium, that the tubal patency could be assessed by direct observation of intra luminal flow of (Echovist-200) indicating unobstructed tubal passage (Deichert, 1993).