## Role of sonohysterography in endometrial and subendometrial

## **Amr Fatoh Ahmed Al-morsi**

Evaluation of intrauterine structural lesions is among the routine procedures in the analysis of infertile patients. Hysterosalpingography (HSG) has been used to screen uterine cavity abnormalities and tubal patency. HSG requires the use of ionizing radiation and there is a risk of allergic reaction to iodinated contrast media. Transvaginal Sonography (TVS) is a sensitive, simple and noninvasive method that has been used routinely in the screening for endometrial and subendomrtrial lesions. However, the nature of the lesion and the exact localization of the lesion relative to the uterine cavity (i.e. intracavitary, endometrial or submucosal) make accurate diagnosis difficult and some of the lesions may be missed or overlooked. Sonohysterography (SIS) has given a more detailed picture, because the saline solution injected distends the uterine cavity and acts as a contrast agent during transvaginal ultrasound. The procedure accurately delineates the uterine cavity and facilitates a more precise endometrial thickness measurement. The aim of this study was to assess the value of sonohysterography compared with transvaginal and hysteroscopy as compared to biopsy which was considered the gold standard tool for detection of endometrial and subendometrial lesions. Thirty females were included in this study after general and gynecological examination to detect any uterine factors responsible for infertility or abnormal uterine bleeding like myomas, polyps, uterine malformations, uterine adhesions, and endometrial carcinoma.from this study, we conclude that:1. Sonohysterography is a simple, fast, cost saving, well tolerated and relatively accurate method to evaluate the uterine factor in females with infertility.2. Sonohysterography offers several advantages over HSG as avoidance of radiation, no use of contrast media and is done in the office by radiologists.3. Sonohysterography is recommended as a routine after TVS in cases of suspected intrauterine leiomyomas, polyps, uterine malformations and intrauterine synechia.4. Routine SIS after TV-US can save many unnecessary diagnostic hysteroscopies and helps in the preparation for operative hysteroscopies.5. At TV-US when the endometrial thickness can not be accurately measured or when there is non specific thickening, SIS can provide additional information and can be used to direct the patient to visually guided hysteroscopic procedure rather than a potentially unsuccessful blind biopsy procedure.