



What is Fertility Scan ?

Investigation of the probable cause of infertility is complex and in many instances a complicated process.

Detailed sonographic evaluation of reproductive organs , including uterus , ovaries and it's surroundings is important and should involve assessment of tubal patency as well. Thus, the ultrasound scan for the fertility assessment should be "one-stop procedure" called the 'fertility scan'

To yield the best results, the scan must be performed transvaginally. The equipment should be of high resolution with three dimensional (3D) facility and sensitive doppler modalities. Procedure should be done by experts in the procedure.

What does Fertility Scan Involve ?

This an ultrasound guided test and involve three procedures.

Trans Vaginal Sonography (TVS) - 3D Sonography of Uterus / Ovaries and surrounding structures

Saline Infusion Sonography (SIS) - To check Uterus Cavity

Hystero salpingo contrast sonography (HyCoSi) - To check Falopine Tubes

These combined procedures in one stop clinic replaces traditional way of doing conventional ultrasonography to be done separately along with X Ray based Hysterosalpingography (HSG) done separately on another day or location to check for causes of infertility .

Why 3D Ultrasound ?

Three-dimensional ultrasound (3D USG) is a fast-evolving imaging technique that holds a great potential for use in gynaecology. Patients can benefit in adding 3D USG to their routine gynaecological workup as it provides fast and accurate results in a relative cost effective way , compared to CT Scan or MRI.

As in two-dimensional ultrasound (2D USG), transvaginal approach is preferred in gynaecologic examination with 3D USG. Here are some of the reasons for specially using the 3 D USG - Detection of congenital uterine anomalies / Defining and Mapping uterine lesions such as fibroids for clinical decisions and surgical planning / Assessing the Ovaries by Sonography-based Automated Volume Calculation (Sono AVC) for counting number of eggs and monitoring it's growth.

What is Saline Infusion Sonohysterography (SIS)?

Saline Infusion Sonohysterography (SIS) is a test where a small volume of saline solution is pushed into the uterus . This allows better visualization of lining of the uterus (endometrium) and it's cavity to be clearly seen in an ultrasound scan. It is an excellent method of evaluation of uterine abnormalities, like **uterine septum, endometrial polyps** , suspected intrauterine adhesions (synechiae or scar tissue), submucous fibroid **which can be reason for subfertility or recurrent miscarriage.**

What is Hysterosalpingo Contrast Sonography (HyCoSy)?

Hysterosalpingo Contrast Sonography (HyCoSy) isa test where a small volume of foam type of fluid is pushed into the uterus. This allows better visualization of fallopian tubes of uterus , which is not visible normally by simple ultrasonography. It is an excellent method of evaluation of any blockage in tubes as a cause of infertility.

What's the best time to do such scan ?

Timing of the scan is also important and should be performed at a time which maximises the amount and quality of information provided. It's usually between Day 5 – Day 10 of Period.

What to expect during these procedures

A base line transvaginal ultrasound performed prior to SIS/ HyCoSy examination and a 3D evaluation of uterus and ovaries takes place. A small instrument (Speculum) is placed in vagina after cleaning with antiseptic solution.

A very fine special catheter is then gently passed through the neck of the uterus (cervix) . At this point , it is expected to be a bit crampy , but, manageable in most of the cases.

To reduce this discomfort , we prescribe a combination of tablets few hours before the procedure.

If you still feel uncomfortable , procedure will be abandoned and you will be given further advice.

