



The Women's Natural Health Practice Hysterosalpingo Contrast Sonography Fact Sheet

History

Prior to the development of HyCoSy, routine investigation of tubal patency (whether the tubes were blocked or clear) through hysterosalpingography (HSG) and laparoscopy with dye was expensive, time consuming and unpleasant for the patient as these involved the use of surgery, general anaesthesia, hospitalisation and well as using ionizing X-ray radiation. In recent years HyCoSy has increasingly been used in preference to HSG and laparoscopy as a first line investigation for infertility because of its convenience and safety. HyCoSy also allows the examination of the other pelvic organs and because it is a dynamic study it can give valuable information regarding tubal function.

The function of the Fallopian tube

Ovaries produce eggs which need to meet the sperm if pregnancy is to happen. After fertilisation occurs in the fallopian tube, the embryo must progress to the uterine cavity, where it implants in the endometrium. If the tube is blocked, then the egg and sperm are unable to meet. If the embryo, after fertilisation, does not pass through the tube at the normal rate, then it can implant in the Fallopian tube resulting in an ectopic pregnancy.

The causes of infertility

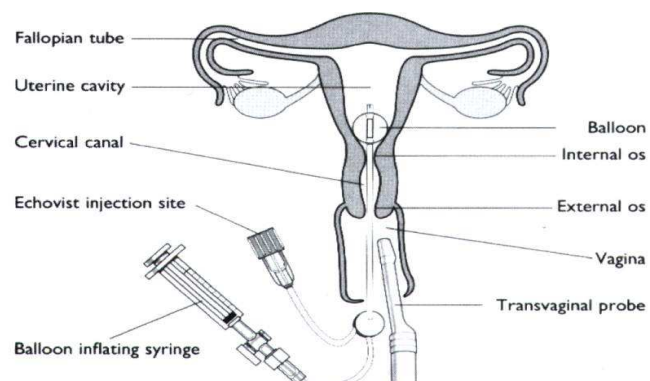
Infertility affects up to 10% of couples in the western world and 20-40% of these cases may be due to previous abdominal surgery or infection of one or both fallopian tubes.

What causes damaged fallopian tubes?

This damage may have been caused by a multitude of reasons, such as a previous history of infection secondary to acute pelvic inflammatory disease, burst appendix, or use of an intrauterine contraceptive device. However, some infections, notably with Chlamydia, are frequently asymptomatic and findings of tubal damage often come as a complete surprise. For these reasons exclusion of tubal blockage is crucial in the investigation of infertility or assessment of potential fertility.

HyCoSy explained

Hysterosalpingo-contrast-sonography (HyCoSy) is a transvaginal ultrasound technique in which a solution of galactose (Echovist) is infused into the uterine cavity and observed to flow along the Fallopian tubes to assess tubal patency. The bright echoes generated by the Echovist make tubal visualisation easier, which is further improved by the addition of colour Doppler imaging. HyCoSy needs to be carried out between the last day of a menstrual period and day 10 of a natural unprotected menstrual cycle (with the first day of the menstrual period counting as day 1) or on any non bleeding day of the cycle if reliable contraception is being used.

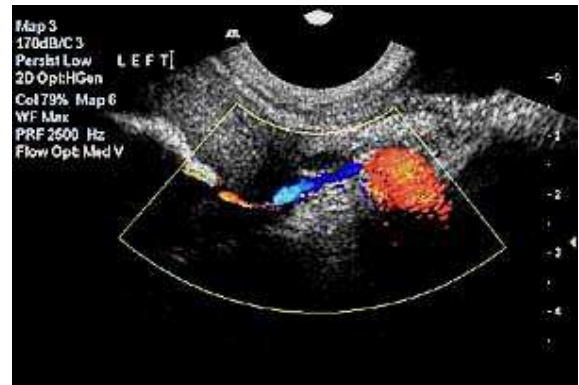


The advantages of HyCoSy

- It can be combined with a baseline ultrasound screen of the pelvis.
- The uterus can be scanned for size, and fibroids or structural abnormality excluded.
- The ovaries can be confirmed to be normal in size and position, with the absence of polycystic ovaries (causing ovulation problems), endometriosis of the ovaries or other unsuspected cysts.
- Tubal patency can be confirmed at the same time.
- If timed correctly ultrasound diagnosis of ovulation can be confirmed.



Ultrasound image showing fallopian tube defined with white contrast medium



Colour Doppler ultrasound image of fallopian tube with contrast medium

Preparation for HyCoSy

Before a HyCoSy is carried out vaginal swabs need to be taken to rule out any infection. These can be taken at the initial consultation visit or on a short appointment one week before your HyCoSy visit. The cost of these swabs is included in the HyCoSy price.

Is there any discomfort?

There can be discomfort associated with this procedure, particularly if the Fallopian tubes are blocked. A menstruation like pain of mild to moderate intensity may occur during the procedure. Taking an analgesic such as Neurofen (two tablets) half an hour before the procedure will help to reduce the discomfort. Some patients also experience period like cramping pains after the procedure for a few hours.

Summary

HyCoSy is a low risk procedure that is of comparable accuracy to HSG, indicating which direction further diagnosis and treatment of infertility should take. This technique, along with transvaginal ultrasound, is an ideal screening test for tubal patency in the assessment of infertility. The price including all consumables is £390.00, plus pre-procedure swabs at £43.00.