Investigating tubal patency
Fallopian tubes are the tubes attached to your womb which help with the transfer of egg released from your ovary. Sperm and egg meet in the fallopian tube where fertilization occurs. The embryo that forms is then transferred into the womb where it implants. If one or both fallopian tubes are blocked this can impair your fertility. It is therefore advisable to check your tubes are patent when investigating couples for fertility problems. This can be done in one of three ways: Hysterosalpingography (HSG), Hysterosalpingo-contrast-ultrasonography (HyCoSy), or Laparoscopy and Dye test.

Women with no known previous sexually transmitted infections or pelvic inflammatory disease, previous ectopic pregnancy or endometriosis are generally offered a HSG or HyCoSy depending on the expertise available. Women who are suspected to have any of the above comorbidities would be offered a laparoscopy and dye so that other pelvic problems, such as scar tissue (adhesions) or endometriosis, can be assessed and, if appropriate, treated at the same time. HSG is an outpatient procedure usually done within 10 days of the start of your period. Following a speculum examination, a small tube is passed through the neck of the womb (cervix) into the womb cavity. A dye is then introduced which flows through the tube into your womb cavity and a series of X-rays are taken. It can be a little uncomfortable but most women tolerate the procedure well. There is a very small risk of infection spreading from the vagina up into the pelvis and therefore screening for infections is offered before the procedure or you will be given antibiotics. HyCoSy is similar to HSG, but the flow of dye is followed on ultrasound scan as opposed to X-ray.

A laparoscopy and dye test (key-hole camera test) is an operation usually performed as a day case procedure under general anaesthesia. A small cut (1 cm) is made in your tummy button (umbilicus) and your abdomen filled with gas to distend it. A small camera (the laparoscope) is the passed through the cut. A second smaller (1/2 cm) cut is made to allow another instrument to be introduced which helps the surgeon inspect the pelvic organs and fallopian tubes. A blue dye (methylene blue) is passed through the neck of womb and watched as it fills and then spills from the fallopian tubes providing they are open. Laparoscopy is associated with more risks than HSG or HyCoSy which is why it is generally reserved for women who are more likely to have problems. The risks include infection, excessive bleeding requiring blood transfusion, blood clots in legs and lungs, and damage to the bowel, bladder and major blood vessels although these are rare. The choice of tubal patency test depends upon your clinical history. Every test has its own advantages and limitations. Discuss these with your fertility expert.