



## Infertility Evaluation

Infertility or subfertility is usually defined as the inability to conceive after 12 months of having unprotected sexual intercourse in a woman under 35 years of age, or after 6 months in a woman over 35 years of age.

### When to seek advice?

Studies have shown that while a large majority of couples (80-90%) normally conceive within the first year of attempted conception, the likelihood of conception decreases over time and with advancing age. The likelihood of conception is highest in the first 3 months of trying, and then decreases. In women under 35 years old, up to 4 in 5 couples should conceive within the first 6 months. Therefore, it is reasonable to seek fertility advice and/or investigations after 6 months of unsuccessful trying for conception. In older women, I would advise seeking fertility advice and /or investigations after 4 months of trying.

A study has suggested that after 6 months of trying for conception, 1 in 2 of the remaining couples who fail to conceive may need fertility assistance. Therefore, in general, I would advise a discussion with your General Practitioner (GP) or a fertility specialist after 4 to 6 months of trying for conception, depending on your age and individual situation, to consider starting investigations.

### What are the causes?

#### Female Factor – 30%

The most common cause of female factor infertility is advancing age. There may also be an ovulation dysfunction, which may be related to abnormality in hormones released from the brain, or hormones from the ovary such as polycystic ovarian syndrome or ovarian failure. Other causes of female factor subfertility include blockage of fallopian tubes or pathology in the uterus including polyps and fibroids. Pelvic endometriosis is another common cause that may compromise fertility. It is found in approximately 30% of subfertile women who experiences no other symptoms of endometriosis, and in 85% of subfertile women who experiences pelvic pain during their periods or at other times. Other conditions which can also compromise fertility include thyroid dysfunction or cancer chemotherapy treatment.

#### Male Factor - 30%

Causes can include dysfunction in production of sperm, or the delivery of sperm. Other causes such as overexposure to certain chemicals and toxins can also compromise fertility. These include heat, chemicals, tobacco smoke, alcohol, marijuana, and steroids (including testosterone). Treatment for cancer can also impair sperm production.

#### Combined Female and Male Factor – 30%

It can be a combination of the above mentioned causes.

#### Unexplained Subfertility – 10%

Infertility where no cause is found.

### Investigations

#### Investigations may include:

Blood tests to measure your hormone levels and determine if you are ovulating. Ovarian reserve quantification (looking at quantity of eggs in the ovaries) can also be performed.

Imaging studies such as a pelvic ultrasound or hysterosonography may be performed to obtain a detailed view of your uterus, ovaries, and sometime fallopian tubes.

Laparoscopic and hysteroscopic evaluation involves operating with the aid of a thin long camera through the cervix into the uterine cavity or through small incisions in your abdomen, in order to look for pathologies such as polyps or fibroids in the uterus and endometriosis and adhesions in the pelvis.

Semen analysis to look at sperm parameters including the amount of sperm (sperm concentration), the proportion of sperm moving in an appropriate fashion (progressive motility) and proportion of sperm with normal shape (morphology).