



# **Male Reproduction**

As men with cystic fibrosis (CF) live longer and healthier lives, many more are becoming parents. Although men with CF can enjoy a normal sex life, most are unable to conceive naturally.

Approximately 98% of men with CF are infertile. This is due to a blocked or absent vas deferens, but sperm are produced normally. The vas deferens is the tube that carries sperm from the testes to the ejaculatory duct. This means that most men with CF will not be able to conceive a child without medical help. However, men with CF still get erections and ejaculate when they orgasm.

## With Assisted Reproductive

Technologies (ART) many men with CF are still able to have their own biological children.

## **Semen Analysis**

If you are male with CF, you should consider having a sperm count done whether you are planning a family or not. While there is a 98% chance you don't have any sperm in your semen, there is a 2% chance you do! Semen analysis measures the numbers of sperm, motility (ability to move), size, shape and volume of ejaculate sample.

This information can help you to make good sexual and reproductive health decisions now and into the future.



# Assisted Reproductive Technologies

Assisted reproductive technologies (ART) are used if couples are experiencing difficulties conceiving a child naturally. Sperm extraction followed by In Vitro Fertilisation (IVF) is the technique which is used to assist men with CF, who are infertile, to conceive a child.

## **Sperm Extraction**

Is a procedure done under local anaesthetic to extract the sperm from either the testicles or the tubes connected to the testicles. Men with CF produce sperm in their testicles, but the blocked or missing vas deferens means that the sperm are unable to get out through the penis. Sperm extraction is carried out so to enable creation of an embryo through IVF.

#### Intracytoplasmic Sperm Injection (ICSI)

Is an IVF procedure where a single extracted sperm is directly injected into the woman's egg, assisting with fertilisation and the development of an embryo. This procedure is used in males with CF because of the low ejaculate volume associated with poorly functioning/absent seminal vesicles (structure where semen in produced). The technique is useful in men with CF because of the problems with semen and sperm.

Usually the female partner will have ovarian stimulation with hormones to increase the number of eggs for collection. The egg collection is usually done under ultrasound procedure. The semen sample is needed on the same day as egg collection. The egg is then fertilised with a single sperm in the laboratory. Once fertilisation is successful the embryo is placed in the woman's uterus. It is recommended that potential risks or complications associated with ICSI should be discussed with your fertility specialist.

## **Useful Resources**

- <u>CF Carrier Screening Program (CF Community Care)</u>
- <u>CFWA Reproductive Factsheets</u>
- <u>Assisted Reproduction (Reproductive Technology Council)</u>
- <u>Assisted Reproductive Treatment (Varta)</u>

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