Gloucestershire Hospitals
NHS Foundation Trust

Patient Information

Azoospermia or severe oligospermia

Introduction

This leaflet describes the treatment options available for men with azoospermia or severe oligospermia.

'Azoospermia' and severe 'oligospermia' are the words to describe an absence of sperm or very few sperms in the ejaculate. Various factors can contribute towards these conditions some of which may be inherited.

Isolation of sperm from ejaculate

Sometimes a few sperm can be isolated from the ejaculate, even if standard semen analysis has previously failed to find any sperm.

To find these sperm, the whole ejaculate is prepared using a method called a density gradient. This separates out any sperm present and concentrates them into tiny droplets. This droplet is then examined for the presence of sperm.

If no sperm are found, the droplet is further prepared to perform an even more thorough search for sperm.

Any sperm found can be frozen for future use in ICSI (Intra Cytoplasmic Sperm Injection). Consent forms for sperm storage must be completed.

If no sperm can be found, even following this final examination of droplets (now called long drops), the sample is said to be azoospermic (contains no sperms at all).

Where no sperm can be found in the ejaculate we can proceed to SSR (Surgical Sperm Retrieval) directly from the testes.

SSR (Surgical Sperm Retrieval)

SSR allows us to take the sperm directly from the testis or epididymis. SSR can be used for men who have had a failed vasectomy reversal. It may also be suitable for men with spinal injuries and where there are problems with normal ejaculatory function.

Reference No.
GHPI0455_06_21
Department
Gynaecology
Review due
June 2024

Patient Information

Before the SSR you will be given intravenous (injected) sedation then a local anaesthetic will be injected into the scrotal skin. Sedation will make you sleepy but aware of what is happening.

A needle is used to suck small lengths of sperm producing tubes. These are then carefully dissected (cut up) under a microscope and any moving sperm found are cultured (grown) overnight then frozen. These sperm are later assessed to see if they are suitable and if so the couple proceed to IVF (In Vitro Fertilisation) with ICSI.

If no sperm are found by the SSR procedure the final option for the couple is donor sperm insemination.

Azoospermic and severely oligospermic men attending the clinic do not have to accept all of these options. They can choose donor insemination at any stage. However a thorough examination of the ejaculate is recommended before resorting to SSR.

Contact information

If you have any questions, please feel free to contact the fertility nurses through Mrs K Reddy's secretary on the number below:

Cotswold Fertility Unit
Tel: 0300 422 3128
Monday to Friday, 8:00am to 4:00pm
Website: www.cotswoldfertilityunit.co.uk

Further information

Human Fertilisation Embryology Authority (HFEA)
Website: www.hfea.gov.uk

Content reviewed: June 2021