

Centre for Reproductive Medicine

Donor Sperm Treatment

Patient Information

Donor sperm may be used in circumstances where a patient is unable to conceive either because their partner has no or exceptionally low numbers of sperm, because they are in a same-sex relationship or they have no partner. Donor sperm is donated by voluntary donors, frozen and stored in a donor bank. Donor sperm may be used in several different assisted conception treatments including artificial insemination and in vitro fertilisation.

Why may donor sperm be necessary? Because the partner has no sperm or very low numbers of sperm or sperm of exceptionally poor quality; to avoid transmission of a genetic disease which is carried by the sperm; to provide the possibility of a pregnancy to a person who does not have a male partner.

How is donor sperm obtained? volunteers produce sperm usually in response to recruitment campaigns. There is no selection process in terms of their social or educational background although many donors historically were from the student community.

Are donors screened? Yes. First they have a health questionnaire specifically for personal or family health issues which are known to have a hereditary basis. Secondly, they are screened for known sexually transmitted diseases such as Chlamydia, Syphilis and Gonorrhoea. Thirdly, they are screened for viral illnesses such as HIV, Hepatitis B & C and Cytomegalovirus (see additional information sheet for details concerning cytomegalovirus and its implications for selecting and using donor sperm). They are also screened for chromosomal abnormalities and cystic fibrosis and finally so that we know their blood group.

Is the sperm tested and do we know it is fertile? The sperm is tested for its quantity, quality and ability to withstand the freezing/thawing process. Donors are only accepted if they produce good quality sperm. Unfortunately we cannot guarantee the fertility of sperm even though it may appear on testing to be of good quality. A proportion of donors are known to have had children previously.

Is the sperm available for use immediately after it is donated? No. The sperm is placed in quarantine for 180 days and the donor retested for the known viral illnesses mentioned above before it is released for use.

How is the sperm stored and how can we be sure of its origin? Sperm is stored in straws or ampoules which are sealed and labelled with uniquely identifying codes which indicate who the donor is. The straws or ampoules are placed in liquid nitrogen at -196°C in a large storage vessel.

What information about the donor will we be given? As from 1st April 2005, all new donors accept that a child who results from donor sperm treatment may wish to know of their biological origins at some stage in the future. Thus when a child resulting from donor sperm treatment reaches the age of 18 they can access the identity of the donor. This information together with the relevant medical details, is kept on permanent record at a central registry. At the time of treatment you will have access to the physical characteristics of the donor including hair, eye and skin colour and build. You may also have access to other non identifying characteristics such as interests and education.

Will my partner be the legal parent of the child? If you are married your partner will be the legal parent of the child. We will need to see and take a copy of your marriage certificate or certificate of civil partnership.

If you are not married to your partner then you will both be able to sign consent forms before starting your treatment to ensure that both of you have legal parentage of and responsibility for the child. It is most important in this respect that the partner must consent to the treatment.

How many other children will the donor produce? The legal limit is 10 families per donor in the United Kingdom (excepting multiple pregnancies). It is also possible for a person who has conceived a child with donor sperm to receive further treatment using the same donor and conceive a further child, who is related to the first as a sibling, even though the number of live births from that donor has already reached ten.

Coming to terms with the need for donor sperm and counselling? Undergoing donor sperm treatment raises a number of psychological and emotional issues for both partners or single recipients. Particularly important points include information that you decide to give to the child that may result from treatment and the scope for strain in family relationships that can arise as a consequence of a child being born whose genetic parent is unknown to either partner. All patients and couples planning to have donor sperm treatment must receive counselling to help them explore and understand these and other issues relevant to this treatment.

If we are successful with donor sperm will we be able to have further treatment using the same donor? We strongly advise you to purchase enough sperm for your future use, as the donor may not be available in the future.

Will the donor know who the recipients of the sperm are? No. Your information and that of the child that results from treatment is kept on record at the national registry (Human Fertilisation and Embryology Authority), however this is confidential information and cannot be given to a third party without your written permission.

How is the treatment carried out? Donor sperm treatment is provided by artificially inseminating sperm into the vagina. There are several different ways of carrying out this treatment:

1. Insemination into the top of the vagina
2. In and around the cervix (intracervical insemination –ICI)
3. Into the uterine cavity (intra uterine insemination – IUI)

The most common approach in our Centre is to carry out intrauterine insemination (IUI) which we believe to be most likely to result in a pregnancy. In addition it is common practice to gently stimulate the ovaries in order to a) ensure predictable ovulation and b) encourage the production of more than 1 egg to increase the chances of a pregnancy. Carrying out donor insemination with ovarian stimulation increases the risk of a multiple pregnancy but the treatment involves close monitoring to ensure this risk is minimised.

The details of the ovarian stimulation are dealt with in our patient information booklet. Briefly donor insemination involves:

- preliminary tests to ensure that the patient is capable of producing eggs and that there is no uterine and ovarian abnormality
- selection of a suitable donor
- ovarian stimulation with clomid tablets and gonadotrophin injections on days 5, 7 and 9 of the cycle
- ultrasound scans to measure development and numbers of eggs – typically 2-3 scans
- trigger of egg release with an hCG injection
- insemination of sperm after visualising the cervix by speculum examination and passing a fine catheter through the cervix. This part of the treatment requires you to attend the clinic for about one hour and does not require an anaesthetic.

How likely is treatment to work? There is a 10-14% chance of a live birth per insemination depending on your circumstances.

How likely am I to have twins? The chance of twins with this treatment is no higher than 10% and of triplets less than 1%.

If you have any further queries please contact us on 024 76968879

The Trust has access to interpreting and translation services. If you need this information in another language, please contact the Quality Manager on (024) 76968864, and we will do our best to accommodate your needs. The Trust operates a smoke free policy.

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