

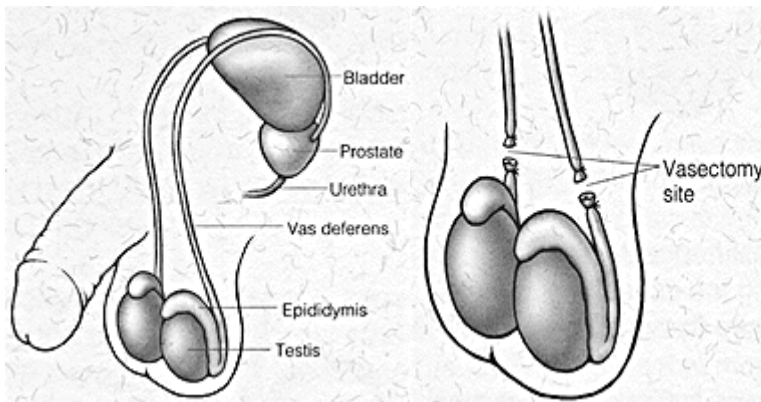
Information about the surgical extraction of sperm

Infertility will occur when there are no sperm in the semen. (azoospermia) There are 2 main reasons why this may occur.

Obstructive azoospermia

In over half of such cases the sperm production in the testis is normal but there is a blockage which prevents sperm from entering the semen . This may be due to a variety of reasons:

1. Failure of the sperm passages to develop (Congenital absence of the vas – this is something that a person is born with, and can sometimes be associated with a condition called Cystic Fibrosis)
2. A blockage of the sperm transport tubules (rete,epididymis or vas) This may be caused by a variety of reasons – such as previous surgery in the genital region eg.hernia surgery, surgery for undescended testis etc, or by trauma, inflammation or tumours.
3. A previous vasectomy operation.



Although many vasectomies and sperm blockages may be corrected by surgery this is not always successful.

For men who are born without the connecting tubules (congenital absence of the vas deferens) , there is no surgical correction available.

Non obstructive azoospermia

In these cases, there is no problem with the tubules (“plumbing”) but rather with the testes themselves. In other words the testes themselves are failing to produce enough sperm.

There are various causes for this, which may include:

1. End organ failure. In this case the testes have failed, and often the testes are smaller than usual, and hormone levels may show low levels of the male hormone testosterone, and elevated levels of a hormone called FSH (which is the “fuel” released by the pituitary gland to drive the testes)
2. Previous testicular damage - as may occur following chemotherapy used to treat cancer, various types of surgery (which may include accidental injury to blood supply during hernia repairs etc), and previous accidental trauma.
3. Genetic reasons. Are genes (on our chromosomes) are basically our “software” and if we are not born with the right genes, sperm will not be normally produced.
4. Tumours or other infiltrates that damage the testes

Testing

Various tests may be done to try and find the reason why there are no sperm in the ejaculate.

These tests may include:

1. Blood tests (to measure hormone levels, check the chromosomes, screen for the cystic fibrosis carrier gene)
2. Ultrasound of the testes

Retrieving sperm

This may be done in one of two ways. Both procedures are done under local anesthetic block at the Victoria Fertility Centre.

1. **PESA – Percutaneous Epididymal Sperm Aspiration**
A fine needle is inserted into the epididymis, at the upper area of the testis. The sperm are aspirated by gentle suction.
2. **TESE – Testicular sperm extraction**
A small incision is made in the scrotal skin, and sutures are used to close the skin.

Sometimes we first try a PESA and if this is not successful, move on to doing a TESE. If sperm are retrieved, they are then frozen in small vials called “straws”. A couple of days later, one of these straws is thawed to see how the sperm recover from the freezing. This is called a “sacrifice thaw”.

The sperm retrieved in this way are unsuitable for insemination. The only way to use such sperm to fertilize the eggs is do a procedure called In Vitro Fertilization and ICSI. (Intra cytoplasmic sperm injection) It is very important that you read up about ICSI. There is a file on our website (under the section called Information Sheets – called Intracytoplasmic sperm injection)

Your partner will need to go through a process of superovulation (see information on IVF) in order to harvest and retrieve her eggs.

It is important to note that sperm may not always be identified. If sperm cannot be found, there is little further that can be done. If this is the case, a sample of the tissue will be sent for pathology to try and identify a cause.

Risks of PESA and TESE

1. Reaction to the local anesthetic.
2. Bleeding
3. Infection
4. Damage to the testis

After treatment

There will be some bruising and tenderness of the scrotum for up to 2 – 3 weeks after a PESA or TESE. When a skin opening is needed the stitches will self dissolve in a couple of weeks.

It is essential that you ice the area for at least 24 hours afterwards.

Pain control is important. It is suggested that a combination of Tylenol and Advil is used regularly for the first few days.

Antibiotics will be routinely prescribed to help prevent any infection.

Healing may be aided by taking twice daily 5 minute baths with small amounts of added salt or disinfectant (e.g. Savlon) We would also advise that if you have a small incision you put a little Polysporin ointment over the area twice daily.

If a TESE is performed you should not exercise or have sex for at least 3 - 4 weeks

You should contact VFC with any concerns.

Phone number: 250 704 0024

CONSENT FOR SURGICAL PROCEDURE of PESA or TESE

1. I, _____, hereby
(Name of Patient or Authorized Person)

consent to a PESA (percutaneous Epididymal sperm aspiration) or TESE (Testicular extraction of sperm)

to be performed by Dr. Stephen Hudson

2. I confirm that Dr. Hudson has informed me about this procedure and its risks and possible complications. Complications from this procedure may include (but are not limited to) bleeding, infection, and testicular damage If a complication was to occur, there may be a risk of future fertility related problems.
3. I agree that, at his discretion, Dr. Hudson may make use of the assistance of the Clinic Medical Staff, and permit them to assist in all or part of the procedure.
4. I agree to taking the prophylactic antibiotics recommended.

Signature of Patient: _____

Dated this _____ day of _____, 20_____.

Information received from Assisted Human Reproduction Canada via the Canadian Fertility and Andrology Society.

Patient Information Sheet – Consent to use legislation

This information is provided by Health Canada – and as someone who is planning on freezing sperm – which may later be used for the purpose of creating an embryo (which may become a baby) – **you are legally required to read this and sign appropriately to confirm that you have done so.** In summary what this wordy document is saying – is that you need to be aware that sperm that has been frozen - may one day be used with your consent to make a baby, or that you may choose not to use this sperm and either have it destroyed or donate it to research or to the VFC (Victoria Fertility Centre) for teaching and laboratory instruction.

Regulations under Section 8 of the Assisted Human Reproduction Act Regarding “Consent to Use”

New regulations under the Assisted Human Reproduction Act have been established to ensure that you are informed about the use of your sperm or eggs to create an embryo*, and the use of your in vitro embryos for any purpose. These regulations apply whether the sperm, eggs or in vitro embryos are for your own reproductive use, or that of a third party**. The new regulations mean that before you consent to the use of your sperm or eggs to create an embryo or in vitro embryos for any purpose, you need to be informed about your choices, and think carefully about decisions concerning:

What can your sperm, eggs or in vitro embryos be used for?

What use can be made of any extra in vitro embryos not needed for your reproductive use?

What will happen to the sperm, eggs or in vitro embryos if you die?

What if you change your mind?

WHAT YOU NEED TO KNOW BEFORE CONSENTING TO:

Use of your sperm or eggs to create an embryo,

Use of your in vitro embryo for any purpose.

Removal of sperm or eggs from your body after your death to create an embryo,

If you are consenting to the use of your sperm or eggs to create an embryo, you must provide written consent specifying the purpose(s) for which they can be used.

This includes:

you, or you and your spouse/partner's reproductive use,

the use by your surviving spouse/partner*** if you die,

the reproductive use of a third party,

improving assisted reproduction procedures,

providing instruction in assisted reproduction procedures,

other research, (if there are excess in vitro embryos created that are not needed by your surviving spouse/partner, or a third party)

If you are consenting to the use of your in vitro embryos, you must provide written consent specifying the purpose(s) for which they can be used.

This includes:

you, or you and your spouse/partner's reproductive use,
 the reproductive use of a third party,
 improving assisted reproduction procedures,
 providing instruction in assisted reproduction procedures,
 a specific research project, the goal of which is stated in the consent.

What if there are extra in vitro embryos?

Sometimes there are more in vitro embryos than are needed.

If your sperm or eggs and the sperm or eggs of your spouse/partner are used to create in vitro embryos for use by you and your spouse/partner, it is up to the two of you to decide what to do with the extra in vitro embryos.

If your sperm or eggs are to be used by your surviving spouse/partner after your death, he or she can decide what to do with any extra in vitro embryos created.

However, should your surviving spouse/partner decide to donate the excess in vitro embryos for improving or providing instruction in assisted reproduction procedures or other research, he/she can only do so if you have given your prior written consent for this use.

If your sperm or eggs are used to help create in vitro embryos for the reproductive use of a third party, it is the third party (person or couple) who must consent to the use of the in vitro embryos, including any excess in vitro embryos not needed for their reproductive use. If the third party decides to donate the excess in vitro embryos for improving or providing instruction in assisted reproduction procedures or other research, your prior written consent for such use is also needed.

If your sperm or eggs are to be used to create an in vitro embryo for improving or providing instruction in assisted reproduction procedures, no additional "consent to use" from you is required to permit the use of the in vitro embryo for that purpose.

WHAT IF YOU CHANGE YOUR MIND ABOUT USING YOUR SPERM, EGGS OR IN VITRO EMBRYOS?

If you have provided "consent to use", and then decide you do not want your sperm, eggs or in vitro embryos to be used:

Your withdrawal must be in writing,

The written notice of your withdrawal must be received by the person, clinic, physician or researcher who will be using your sperm, eggs or in vitro embryos before specific timelines.

What if you want to withdraw consent to the use of your sperm or eggs?

If you decide to withdraw consent to the use of your sperm or eggs for your own use or that of your spouse/partner, or for improving or providing instruction in assisted reproduction procedures, your notice must be received before the material is used.

If you decide to withdraw the consent to the use of your eggs or sperm for a third party, the physician who will be using the sperm or eggs for the third party must receive your written notice before the third party has acknowledged in writing that the material has been designated for their reproductive use.

If you provided your sperm or eggs to create in vitro embryos for the reproductive use of a third party couple, if one of the individuals in the other couple provided their sperm or eggs (along with yours) to create the in vitro embryos, then the consent of only that individual is required for the subsequent use of the in vitro embryos should the couple divorce or separate.

What if you want to withdraw consent to the use of your in vitro embryo?

You must withdraw consent to use your in vitro embryo for your own reproductive use before the in vitro embryo is used.

To withdraw consent to use your in vitro embryo that was donated to a third party, you must make sure that the clinic or physician who will be using the in vitro embryo for the third party receives notice before the third party has acknowledged in writing that the in vitro embryo has been designated for their use.

Similarly, if you decide to withdraw consent for the use of your in vitro embryos for improving or providing instruction in assisted reproduction procedures, the notice must be received by the person using the in vitro embryo before that person has acknowledged in writing that the in vitro embryo has been designated for such use, or the thawing of the embryo has begun, whichever is later.

If you wish to withdraw consent to use your in vitro embryos for a specific research project, such as the creation of a stem cell line, the notice must be received by the researcher before that person has acknowledged in writing that the in vitro embryo has been designated for such use, or the thawing of the in vitro embryo has begun or the creation of the stem cell line using that in vitro embryo, whichever is later.

WHAT HAPPENS IF YOU DIE?

Your sperm or eggs can only be removed from your body after your death to create an embryo with your prior consent to removal for the following purposes:

use by your surviving spouse/partner;

improving assisted reproduction procedures;

providing instruction in assisted reproduction procedures

It is important to know, that before removing the sperm or eggs from your body after your death, the physician must have the following:

Your signed acknowledgement that you have read the information about the use and removal of sperm or eggs after death;

Your written consent to remove the sperm or eggs;

Your written "consent to use" the sperm or eggs to create an embryo.

If you change your mind and want to withdraw your consent for the removal, you must make sure that you have provided written notification to the doctor who will be removing the sperm or eggs.

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Note: You must sign an acknowledgement of receipt of written information outlined in this pamphlet prior to providing your "consent to use". Your signed "consent to use" must be witnessed.

If there is a discrepancy between this text and the "consent to use" Regulations, the Regulations will take precedence.

The full text of the Regulations can be found at:

<http://canadagazette.gc.ca/partII/2007/20070627/html/sor137-e.html>

The regulations specify:

when "consent to use" is needed,
 who must provide "consent to use",
 who must obtain "consent to use",
 the information to be provided,
 the requirements for the withdrawal of "consent to use",
 the requirement for consent to remove sperm or eggs after death.

* In this document "embryo" includes both an in vivo embryo (i.e. inside the body) and an in vitro embryo (i.e. outside the body).

** In this document "third party" refers to an individual or couple other than the donor of the sperm or eggs, and his or her spouse\partner. In the case of embryos, "third party" means an individual or couple other than the individual or couple that the embryo was created for.

*** In this document "partner" refers to the individual with whom you have been living together as a couple for at least one year immediately prior to the use of your sperm or eggs or in vitro embryo.

Acknowledgment

I, _____
 Printed name

hereby acknowledge that I have read and understood the above information.

Signature: _____

Signed on this day the _____ of _____, 20____

Victoria Fertility Centre

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 Victoria, British Columbia, V8X 5J2
 (250) 704-0024 Fax: (250) 704-0034
 E-mail: info@victoriafertility.com

SPERM BANKING (AND THAWING) AGREEMENT – FOR OWN REPRODUCTIVE USE

I, _____ of _____
(name) (address and telephone)

hereby request that the Victoria Fertility Centre (VFC) cryogenically freeze and store my sperm for my benefit.

I agree that:

1. VFC will store my sperm samples and produce them on my demand and on the demand of no other without evidence of my express consent except only for physician prescribed ART treatment for myself and my partner at VFC.
2. I consent to the use of this cryopreserved sperm to be used for my own future reproductive use. I understand that the cryopreserved sperm will need to be thawed in order to be used for the creation of an embryo, and hereby give consent for the sperm to be thawed and for such thawed sperm to be used for my own reproductive use. Specifically I consent to the use of this sperm for the creation of an vivo or in vitro embryo for the purpose of establishing a pregnancy. (in vivo means that fertilization would occur in the female body and would require using the sperm for insemination, while in vitro means that the sperm would be used to fertilize the eggs outside the female body in a laboratory, with the created embryos then being transferred in to the uterus). If In Vitro Fertilization is used to create embryos, and there are extra embryos available to freeze, I further consent to such embryos being cryopreserved for my own later reproductive use.
3. I will not hold the physician, VFC or any of its employees responsible for the failure of the sperm to survive freezing and thawing.
4. I will submit to any further testing that might be required by VFC, to comply with relevant regulations, while my samples are in its control and possession. Failure to be tested will result in VFC not continuing to store the sperm samples.

5. In the event of my death, I hereby consent (choose one of the following – please circle your choice)

i) That any cryopreserved sperm remaining at VFC be destroyed. Yes No

OR

ii) That the remaining frozen sperm at VFC be used for the future reproductive use of

my partner _____ Yes No

name of partner

iii) That the ownership of the remaining cryopreserved sperm at VFC be transferred to:

Name of person

6. I have the right to request, in writing, at any time, the destruction of my sperm samples and VFC will destroy them upon my request.

7. I will pay the initial sperm banking fee(s) and any storage fees requested by VFC in order to preserve any rights to the sperm samples.

8. I hereby agree that it is my obligation to pay the Victoria Fertility Centre an annual storage fee for the storage of my sperm. I have been informed that if I do not pay my storage fee, VFC will attempt to contact me at the contact numbers that I have provided to the clinic. It is my responsibility to inform VFC of any change of address within 3 months.

If VFC is unable to contact me at the phone numbers I have provided, after a lapse of one year I hereby authorize VFC to do the following: (**You must answer Yes to one of the 2 choices**)

i.) Destroy the cryopreserved sperm Yes or No (please circle your choice)

OR

ii) Bill my credit card Yes or No (please circle your choice)

If Yes to billing your credit card – please complete the following details

Credit card Visa Number _____ Exp date _____

MC Number _____ Exp date _____

If my credit card is expired or invalid – I give VFC authority to destroy my frozen sperm samples

9. I understand that there are additional fees for thawing and preparing banked sperm for use.

Name: _____

Signature: _____

Dated at Victoria, British Columbia, this _____ day of _____, 20 ____