

## **Considering Donor Insemination (DI)?**

One option for treating severe male factor infertility, or for achieving fertility where there is no partner producing sperm is artificial insemination using donor sperm, commonly shortened to donor insemination (“DI”). DI involves placing previously frozen sperm from a donor in the uterus at the time of ovulation.

### **Checklist for DI**

To undergo DI at AART, there is a checklist of testing and other clinic items that must be completed prior to beginning. Unless otherwise stated, testing is valid for 1 year.

For the partner undergoing insemination

- Cavity check within 2 years (strongly recommended)
- Up to date pap test (3 years unless you have had an abnormal pap in the past)
- Swabs for chlamydia and gonorrhea
- FSH, TSH, Estradiol blood tests
- Infectious disease blood tests (rubella, HepB, HepC, HIV, syphilis, CMV)
- Blood type

For the partner (if applicable)

- Infectious disease blood tests

Prior to beginning, you and your partner (if applicable) must complete a consent package. Payment for your treatment is due on the day of treatment, if this falls on a weekend, it will be due the next business day. Donor sperm must be on site when you call with your day 1 of your cycle to begin.

## **WHEN IS DI TREATMENT USED?**

DI can be the treatment of choice in the following cases:

- When the sperm count or sperm quality is very poor.
- When it is not possible to obtain any sperm capable of fertilizing an egg, even by ICSI.
- When the partner providing sperm is a carrier of a hereditary condition.
- When ICSI/IVF is not financially possible.
- For individuals or couples who don’t have sperm available to them (eg single individuals, couples who both have ovaries/uterus).

## **WHERE DOES DONOR SPERM COME FROM?**

Donor sperm is obtained from recognized sperm banks that must meet very strict standards imposed by Health Canada. Each donor is screened rigorously before they can donate sperm, including a careful family history, complete medical and social history, blood typing, and screening for sexually transmitted diseases, hepatitis B & C, and HIV. All donor sperm must meet the requirements of Health Canada’s Safety of Sperm and Ova Regulations.

## **HOW DO I CHOOSE A SPERM DONOR?**

AART does not operate a donor sperm bank, you must contact one of the private sperm banks that has Health Canada-compliant specimens (a list is available from AART) for a list of what donors are currently available. You will be given a brief description of the donor, including racial or ethnic background, blood type, certain physical characteristics and/or certain social characteristics that might be important to you. More detailed profiles are normally available from the sperm banks on request, but there is usually a charge for this extra service.

## **WHAT DOES DI INVOLVE?**

On Day 1 of any treatment cycle (the first day of your period) you must contact AART to advise us of that date and that you intend to have treatment in that cycle. This allows us to double-check that your checklist is up to date and to anticipate that you will be coming for treatment. At that point you will be asked to pay your cycle treatment fee. The time of insemination will usually be determined by you using an ovulation predictor kit to check your urine each day leading up to your fertile period. A positive test tells you that you will ovulate.

When the urine test is positive you must contact AART to make arrangements for the insemination to take place (see below).

After thawing, the sperm is washed so that only high quality sperm is inseminated into the uterine cavity. The actual insemination is a simple procedure and takes only a few minutes. A speculum is inserted into the vagina and the washed sperm is injected through the cervix using a special thin tube or “catheter”.

## **WHEN DO INSEMINATION APPOINTMENTS OCCUR?**

Insemination appointments must be booked in advance with a nurse. Please notify the nursing team on the day of your surge. You will be provided with an appointment time for the same day or next day.

If you notify us before 8am on a weekday (other than holidays), the insemination will typically be completed the same day. If you notify us before 8am on a weekend or holiday, the insemination will be done the next day. If you notify us after 8am, there is a chance you will be booked one to two days after your surge. Inseminations a day or two following a surge are acceptable because there is a 48-72 hour window following ovulation during which the insemination can be completed.

## **HOW SUCCESSFUL IS DI?**

Success depends on many factors, the most important of which is your age: for women under the age of 35 with no other fertility problems the success rate is about 10% per treatment cycle. Success rates decrease as you get older. If you are not pregnant after 3 treatment cycles a follow-up appointment with your physician is recommended and further fertility investigations might be suggested.

## **IS DI SAFE?**

DI is a very safe procedure, especially when no medications are used. Although it is rare, there is a small chance of infection after an insemination procedure. Once a pregnancy occurs it is no different to one occurring naturally in a woman of the same age. The risk of miscarriage is not increased, remaining at about 15% for women under 35. The risk of congenital abnormalities is also the same as for anyone conceiving naturally.

## **ARE THERE LEGAL IMPLICATIONS?**

If you and your partner are not legally married, and you have any concerns about your obligations to the child, you should consult your lawyer prior to committing to DI treatment.

## **IS DI TREATMENT CONFIDENTIAL?**

DI is a confidential process. You do not need to disclose your participation to anyone and the donor will not have access to your identity.

You may or may not have access to the identity of the donor. If it is an open identification donor the child will have access to their information when they turn 18. If it is an anonymous donor, they will not have access, however, given there are DNA websites anonymity may not be guaranteed. You might, or might not, choose to discuss this process with your family, friends, or the children that result.

## **PRE-TREATMENT COUNSELLING (IMPLICATIONS COUNSELLING)**

If you choose donor insemination you will be advised to meet with an implications counsellor before starting treatment to discuss the many issues involved. Although such counselling is not essential before proceeding with DI the counsellor will try to help you prepare emotionally and socially for the process.

The Nova Scotia Health Services Plan does not cover these consultations with the counsellor, for which you will be charged a per session fee by the counsellor.

### **What It Is:**

Implications Counselling is designed to help guide clients through the complex issues associated with the use of donor eggs, sperm, embryos, and gestational carriers. The intent of Implications Counselling is to promote healthy outcomes for all parties involved and create an opportunity for informed consent. It is not an assessment or judgement of an individual's desire to create family.

The Implications Counselling guidelines were approved by the Canadian Fertility and Andrology Society. They are consistent with guidelines for Implications Counselling established by the American Society for Reproductive Medicine and the Human Fertilization and Embryology Authority in the UK.

### **Why It's Recommended:**

It is considered to be an important step for clients using donated gametes or gestational carriers by fertility clinics around the world, to ensure that they have sufficient information to make decisions about their treatment path. It is also important for potential donors and gestational carriers to evaluate if this is a right fit and promote better overall outcomes.

**Who Needs It?**

People who are intending to use known sperm, egg or embryo donors and gestational carriers are asked to complete Implication Counselling before starting the cycle. This includes those who found each other through social media, apps or internet searches. A letter outlining the areas covered, and any issues that may need to be addressed is sent to the fertility clinic and will be placed in your chart. This letter must be on your chart before the cycle proceeds.

People that are using frozen donors from a bank would benefit from an opportunity to discuss the complex issues that are involved but they do not require a letter.

**What to Expect:**

For Intended Parents, Implications Counselling provides an opportunity to discuss a wide variety of short and long-term psychological and social implications for them, their relationships, and their potential child.

Issues discussed include: risks and benefits using anonymous, open identity or known donors, disclosure (who to tell, how to tell, when to tell or do you tell at all), coping strategies, feelings about genetic ties, complicated feelings that arise throughout and after the treatment process, questions around identity for the potential child, ethics around knowing ones genetic roots, boundaries with donors/gestational carriers, the implications of doing a double or single embryo transfer and what to do with surplus embryos.

Donors and Gestational Carriers engage in a similar process in addition to screening for psychological wellbeing to rule out any potential barriers to informed consent. A detailed history is also conducted to rule out any issues that might interfere with the process.

Written consent is obtained to share identified barriers and recommendations with the individuals involved and the Fertility Clinic. The recommendations are created to address barriers before moving ahead with the chosen fertility treatment path.

**Who Does It?**

Implications Counselling is conducted by a psychologist, registered clinical therapist or social worker specially trained in issues related to infertility.

**How Long Does It Take?**

Implications Counselling typically takes:

- one to two sessions for Intended Parents using frozen sperm or eggs from a bank.
- two sessions for Intended Parents using for known donors or gestational carriers.
- two sessions for Known donors or Gestational Carriers.

- It can take longer depending on the number of people involved in the treatment process and the issues that arise. A session with all parties in known donor or gestational carrying arrangements may be necessary.
- It is best to book all the appointments needed to complete Implications Counselling when you first contact the Counsellors office. If all of the sessions are not required, they can be cancelled without cost if done 24 hours before the appointment. If only one is booked and a second is required, there may be a wait time before the next appointment.
- Letters generated from the session are sent to the clinic. There are separate letters for the Intended Parents, Known Donors, or Gestational Carriers. Each letter ranges in cost between \$100-\$195. Letters are completed in a timely manner upon completion of Implications Counselling.

In the event that Intended Parents decide to use a different donor or gestational carrier, a brief update is required for them before proceeding. Full Implications Counselling is recommended for the new donor or gestational carrier. Reports generated following Implications Counselling are valid for one year.

### **Why Does It Take So Long to Get In?**

It can take up to three months to get your first appointment. Currently there is one person in Atlantic Canada that is trained to do Implications Counselling. Training of other clinicians is ongoing. There is one other clinician based in Vancouver B.C. and she is licensed to provide services in Atlantic Canada.

In Atlantic Canada: Lori Parker, M.A. Registered Psychologist  
Fenwick Psychology and Wellness Associates  
902- 421-7514  
[hello@fenwickwellness.ca](mailto:hello@fenwickwellness.ca)

In-person and virtual secure video appointments are available

In Vancouver: Holly Yager, M.Ed., RCC  
Reproductive Health and Fertility Counselling  
[reprohealthfertility.com](http://reprohealthfertility.com)

### **HOW MUCH DOES DI COST?**

There are several costs associated with having DI treatment.

- Counselling, for which you will be billed by the counsellor and pay them directly.
- Sperm samples: Donor sperm must be bought from a donor sperm bank that is approved by Health Canada. Although many donor sperm banks offer samples that are pre-washed, AART, washes all sperm samples that are thawed to remove the cryoprotectant (antifreeze) that was used to protect the sperm during freezing. Washed and unwashed samples are similar and AART does not have a preference for either type.
- Courier fees: These are variable and depend on whether you choose a standard or priority service for shipping the semen from the cryobank to AART.

- Receiving and processing: There is a fee for AART to receive and cryobank each shipment of donor sperm. This fee is for each shipment regardless of how many vials are shipped. If a patient chooses to ship vials multiple times in one year the same fee for receiving and processing will apply again.
- Genetic testing: May be required if the donor is a carrier of a genetic disease.
- Storage: The fee for the first year of storage is waived but there is also an annual fee for ongoing storage of the frozen donor sperm samples in the AART cryobank, regardless of the number of units stored.
- Insemination: There is a charge for each insemination cycle which includes the cycle management, thaw, post-thaw sperm count and assessment, the sperm washing, and the insemination itself. This cost is on top of what the donor sperm bank charges for the semen specimen.
- Fertility drugs (if required): Different types of fertility drugs might be used, and they vary tremendously in cost.
- Ovulation predictor kits.

## **BLOODWORK**

Your physician will order blood tests as part of your initial workup. AART requires infectious disease screening for all patients who are planning treatment with us. Bloodwork ordered for the being inseminated will have timed hormonal bloodwork ordered as well as a CMV status. If you are CMV negative you should not order CMV positive donor sperm, in accordance with Health Canada's directive. Bloodwork ordered for all patients and their partners will include Hepatitis B, Hepatitis C, HIV and syphilis.

Currently to have bloodwork completed in the Maritime provinces, you will have to book an appointment at a location closest to you. There are exceptions to this and some clinics offer walk-in appointments.

Nova Scotia has an online booking portal found here: <https://booking.nshealth.ca/>

New Brunswick residents can call ahead to book, some locations have walk-in service.

Prince Edward Island residents must call the site to prebook an appointment.

Once bloodwork has been drawn, it can take up to two weeks for AART to receive the results.

## **CAVITY ASSESSMENT**

Ideally, basic infertility tests should be done to confirm ovulation, a normal uterine cavity and patent fallopian tubes before commencing IUI/DI treatment. If there is no history of pelvic inflammatory disease then up to 3 cycles of IUI might be considered before performing a test of tubal patency, but if the patient's medical history and clinical examination suggest possible pelvic pathology then either a laparoscopy, a sonohysterogram, or a hysterosalpingogram might be recommended before starting treatment. Your physician will explain which assessment to complete. \*Only one of the below cavity assessments will be recommended\*

## **1. SONOHYSTEROGRAM**

### **WHAT IS A SONOHYSTEROGRAM?**

A sonohysterogram is a special ultrasound procedure, which helps visualize the inside of the uterus and endometrium. This is often done to rule out fibroids or polyps or any other abnormality of the uterine cavity which could potentially interfere with pregnancy. It is similar to a hysterosalpingogram (HSG) but does not use radiation.

At AART a sonohysterogram is offered to some women as an alternative to other methods of cavity assessment which is required prior to many infertility treatments.

### **HOW IS IT DONE?**

The patient will be positioned on a stretcher with stirrups - much like preparing for a pap smear. Using a speculum, the physician will locate the cervix and cleanse it with an antibacterial substance.

A small special catheter will then be gently advanced through the cervix and into the uterus. A small balloon will be inflated to keep the catheter in place. At this time the speculum will be removed and the transvaginal ultrasound probe will be placed in the vagina in order to first confirm catheter placement. Once catheter placement has been confirmed, approximately 10 ml of warm sterile normal saline will be injected through the catheter into the uterus. As the saline solution fills the uterus, images and measurements will be taken aided by the ultrasound.

Repositioning of the catheter and transvaginal probe will continue for a few minutes along with further injections of saline until all areas of the uterus have been examined. The physician may also take the opportunity to check for tubal patency and ovarian cysts. You may experience mild to moderate cramping while the uterus is being examined and this might persist for a few hours following the procedure. An anti-inflammatory medication can be taken prior to or following the procedure as per the attending physician.

### **HOW LONG IS THE PROCEDURE?**

The procedure usually takes between 15 and 30 minutes to complete, although the actual saline injection only lasts a few minutes. You should allow at least 45 to 60 minutes for the entire clinic visit.

### **HOW DO I PREPARE FOR THE PROCEDURE?**

Call the nurses line with your day 1 of your cycle and they will book your sonohysterogram.

Abstain from intercourse from day 1 until after your sonohysterogram.

Fasting is not required. A light meal should be eaten a few hours prior to the procedure. The attending physician may advise you to take an anti-inflammatory medication prior to the

procedure. You are not required to have a full bladder for this procedure, but **MUST** come able to give a urine sample for a pregnancy test prior to the procedure.

### **ARE THERE ANY COMPLICATIONS WITH THIS PROCEDURE?**

Complications are very rare. They may include bleeding or infection.

### **WHAT SHOULD I EXPECT AFTER THE PROCEDURE?**

It is not a requirement, but you may want to arrange someone to drive you home. You may have mild cramping and / or bleeding for 1 to 3 days. Acetaminophen or an anti-inflammatory may be used as required. You can resume normal daily activities.

Call the clinic or your doctor if you have heavy bleeding (more than a period), a fever, or severe abdominal pain.

## **2. HYSTEROSALPINGOGRAM**

### **WHAT IS A HYSTEROSALPINGOGRAM?**

It is a type of x-ray of the uterus and fallopian tubes using contrast media (dye). Its purpose is to see if your tubes are open (patent), and to see if the inside of the uterus (uterine cavity) is normal. Complications of the procedure may include pelvic infection, an allergic reaction to the dye or bleeding.

### **HOW IS IT DONE?**

The hysterosalpingogram is performed in the Diagnostic Imaging Department at the IWK Health Centre.

You will lie down on an x-ray table and be positioned as if having a pap test. A speculum (duck-bill-shaped device) will be placed in your vagina. An instrument called a tenaculum will be used to hold your cervix still. A plastic tube (cannula) will be inserted into the cervix.

The physician will inject the contrast fluid through the cannula. The contrast will flow into the uterus and out through the fallopian tubes. The radiologist will follow the flow of the contrast and take several x-rays during the procedure.

### **HOW LONG DOES THE PROCEDURE TAKE?**

The procedure itself only takes a few minutes.

### **HOW DO I BOOK A HYSTEROSALPINGOGRAM?**

Call the IWK clinic on Day 1 of your period (902-470-7432, choose hysterosalpingogram line)

- State your name and spell your last name.
- Leave a phone number where you can be reached.

- State when your period started, approximately how long it will last, and who the physician who referred you is.
- State if this is your first, second, third, etc attempt at booking.
  - Your call will be returned only if an appointment time is arranged
  - The HSG is performed after your period has finished but before you ovulate.
  - HSG's are performed on Fridays
  - Due to the volume of patients, you may not be able to have your procedure done right away. It may take a few months to have the procedure.

### **HOW DO I PREPARE FOR THE PROCEDURE?**

On the day of your appointment, register at the registration desk located on the 6<sup>th</sup> floor of the IWK Health, Women's Site.

Please drink 2 glasses of water prior to your appointment, you will be asked to perform a urine pregnancy test to make sure you are not pregnant.

You may wish to take some over the counter pain medication one hour prior to the procedure such as Ibuprofen (Advil), Take this medication as directed on the bottle

Be sure to bring a sanitary pad with you.

### **IS IT PAINFUL?**

Some people feel mild discomfort from the tenaculum that is placed on your cervix. You may also feel some cramping. The cramping will be minimal and should be relieved with over-the-counter medications.

### **WHAT DO I DO AFTER THE PROCEDURE?**

You may go home immediately after the procedure and resume normal activities. You may have menstrual-like bleeding or watery discharge after the procedure.

Call your doctor if you have any of the following: fever, heavy bleeding, severe cramping, skin rash. If you are unable to contact your doctor, go to the nearest Emergency Department. If you have any concerns you may call the clinic nurses at **902-470-4732 Nursing Line Extension**, Monday-Friday 8:30am to 3pm.

## **3. HYSTEROSCOPY**

A hysteroscopy is a procedure that allows your physician to look inside your uterus. Hysteroscopy examines the cervix and inside of the uterus. This procedure can correct polyps, fibroids, adhesions and septum's. This procedure is performed in the OR.

## **INSTRUCTIONS FOR ORDERING CRYOPRESERVED DONOR SPERM**

### **PLEASE READ INSTRUCTIONS CAREFULLY**

### **REQUIREMENTS BEFORE ORDERING**

**Before ordering any donor sperm you must have completed the following:**

- a) blood test for CMV (and you must have the results before ordering)
- b) call the nursing line at 902-404-8607 to verify that your treatment checklist is complete
- c) the donor sperm storage consent and agreement (please return to AART)
- d) pay a fee to AART for receiving and processing the donor sperm

**DONOR SPERM COMPANIES**

AART does not sell donor sperm and we do not accept donations from anonymous donors. However, we work closely with Canadian distributors who can ship donor sperm to AART for use in treatment. Their links are listed below.

<https://www.xytext.com/>

<https://www.repromed.ca/><http://www.repromed.ca><http://www.creatingcanadianfamilies.ca>

<http://www.creatingcanadianfamilies.ca>

These companies will direct you to all available options.

**If your CMV test is negative, Health Canada recommends that you order a sperm donor that is also CMV negative.**

If you choose a donor that is a carrier of a genetic condition, it is recommended that you undergo testing to see if you are also a carrier. The genetic testing and counselling is done by a third-party (e.g., Invitae.com) and the cost for this is paid directly (by you) to the company doing the testing. It is your decision if you wish to be tested or not but it is recommended that you are tested. If you wish to proceed with testing, your physician will need to submit a requisition for you, so you will need to contact the clinic to make arrangements for this to happen. Either way, if your donor is a carrier of a genetic condition, you will need to sign a communication of risk form, to indicate you have been informed of the risks that using the donor sperm could present to health and safety.

**WHEN TO ORDER**

1. You must order your donor vials so that they will be received at AART *at least 2 weeks prior* to your anticipated insemination. *Any samples shipped too close to the anticipated insemination may not yet be cleared for use and the insemination cycle may require cancellation.*
2. Check that there are no closures at AART clinic that will affect your order and/or planned insemination (e.g. annual lab shut down, typically in late December).

## HOW TO ORDER

We do not keep an open stock of donor sperm at AART and therefore require that our patients order their samples directly from the suppliers indicated previously.

## ORDERING DONOR SPERM

While you are responsible for ordering donor sperm from a Health Canada-accredited supplier, it is important that you only do so after speaking with an AART nurse or physician. This is because we need to ensure that all of the appropriate tests have been done on you and that our records are up-to-date. It is also very important that we know when your shipment will be coming, because receiving donor sperm shipments involves several specially-trained staff who must all be available at that time. We cannot be responsible for a shipment that arrives without adequate warning – such a situation could put the viability of the sperm at risk, and could lead to extra charges from the shipping company due to extended rental on their cryotank.

When you call the donor sperm company have ready:

- a) your donor choices (*3 donor choices is recommended in case they do not have stock of your first or second choice*)
- b) the number of vials you would like (*we recommend 2-3 per order if possible and unwashed if possible*)
- c) your CMV status
- d) your Rh factor (if known)
- e) the date that you want the samples shipped to AART
- f) your credit card number

## AFTER ORDERING

The donor sperm company will email AART to make us aware of the order.

Should there be any problems with the shipping date, the AART staff will re-organize with the supplier and let you know.

If there are any problems with the order itself (e.g., wrong vials sent), the AART staff will also call the company in order to rectify the problem. You will be informed of any problems if necessary.

You will be called by one of our team members when the sample is received at AART.

**Please remember to contact AART as soon as possible to provide staff with the date of the first day of menstruation in any cycle that you plan to be treated.** This will allow staff to anticipate when you will require treatment and double check that everything is in place for your treatment.

## MONITORING FOR LH SURGE

1. You will check your LH surge starting **Day 8**. If you tend to ovulate sooner than 13-14 days into your cycle, you should start checking sooner.
  - a. Please check once a day (your first pee of the day is most concentrated).
2. You will notify us the day of your LH surge, **prior to 8:00am**
  - a. If you contact us on a weekday - Your insemination will be either that day, or the next day.
  - b. If you contact us on a weekend or holiday, your insemination will be the following day, possibly two days after.

Please Note\* If you notify us later than indicated, your insemination may get pushed a day. **Your ovulation window lasts 72 hours.**