

# **INSTRUCTIONS FOR OVULATION INDUCTION CYCLES**

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# INTRODUCTION

Welcome to the Ovulation Induction (OI) program of Brigham and Women's Hospital (BWH). This booklet has been designed to help you better understand the process of OI. Please use it as a reference when you have questions regarding your treatment instructions. If you can't find answers to your questions in this booklet, please feel free to contact your nurse at the Center for Infertility and Reproductive Surgery.

You have either been given or sent a folder (the Patient Packet) which contains most of the materials you will need to undergo an Ovulation Induction (OI) cycle with us. Included in this packet are the following: a Therapy Instruction Booklet, prescription information, start-up orders, blood test standing order, and a consent form. Make sure to **bring the PATIENT PACKET with you for all of your cycle appointments**. During the course of OI cycle, you will be monitored at either the Brigham and Women's Hospital or at an approved satellite facility.

# TREATMENT

Ovulation Induction (OI) is a process in which medicines are given by injection to stimulate the ovaries to produce many follicles (fluid filled sacs in the ovaries) which contain an egg. OI is begun early in the menstrual cycle after a baseline ultrasound. During a typical OI cycle, stimulation medicine is taken for approximately 7-14 days. Injections are given once or twice a day. Morning injections are done between 5-7am; evening injections are done between 6-9pm. The times of administration should not vary by more than ½ hour daily. Specific orders will be included in your start up orders.

Response to medicines is monitored closely by vaginal probe ultrasounds and blood estradiol (estrogen) levels. When the estradiol is over 200 and one follicle measures 16-20 millimeters, the stimulation medicine is stopped and HCG (human chorionic gonadotropin) is given to cause ovulation in 24 to 36 hours. The HCG medicine is given at midnight. Intercourse or intrauterine insemination will take place as instructed.

## DESCRIPTION OF MEDICATIONS USED

Some of the following medicines will be ordered for you. Consult your individual treatment plan to determine which ones. Additional medications may be necessary.

### STIMULATION THERAPY

#### **MENOPUR/REPRONEX (Human Menopausal Gonadotropin - hMG)**

Menopur and Repronex are injectable medications containing the two hormones, FSH and LH, which stimulate egg and ovarian follicle growth. They are used once or twice a day.

#### **BRAVELLE/FOLLISTIM/GONAL-F (Follicular Stimulating Hormone – FSH)**

Bravelle, Follistim, and Gonal-f are injectable medications containing FSH which stimulate egg and ovarian follicle growth. They are used once or twice a day.

### TRIGGER OVULATION THERAPY

#### **PREGNYL/ NOVAREL/OVIDREL OR GENERIC (Human Chorionic Gonadotropin - HCG)**

Pregnyl, Novarel, Ovidrel or generic HCG are injectable medications which cause the final maturing of the egg and ovulation. They are given when the follicles have reached sufficient size after stimulation therapy. Patients will be instructed to administer HCG at midnight. It is given only once. Intercourse or intrauterine insemination (IUI) will take place as instructed.

### ADDITIONAL MEDICATIONS

Based on a patient's history or past cycles other medications may be ordered. These medications are not standard but are included in case you have them prescribed.

### SUPPRESSION THERAPY

#### **BIRTH CONTROL PILLS (Oral contraceptive Pills - OCPs)**

OCPs are sometimes used the month before the stimulated cycle to suppress hormones. They can also be used for women who do not get regular periods.

#### **LUPRON (Leuprolide Acetate – GnRh agonist)**

Lupron is an injectable medication used to suppress follicular stimulating hormone (FSH) and luteinizing hormone (LH). It is used in some cycles to prevent premature ovulation. It is used once or twice a day. **It is important that you do not get pregnant while taking it.** Therefore we ask that you use condoms or a diaphragm the month you are starting lupron.

## **SUPPRESSION THERAPY (continued)**

### **GANIRELIX/CETROTIDE (GnRh antagonist)**

Ganirelix and Cetrotide are injectable medications used to suppress the hormones FSH and LH. They are used in some cycles to prevent premature ovulation. They are used once a day.

## **PROGESTERONE**

**PROGESTERONE/CRINONE (Progesterone)** - a hormone normally secreted by the ovary after ovulation to thicken and maintain the lining of the uterus. It may be used after intercourse or IUI to add to the body's production of progesterone. Progesterone suppositories and Crinone are vaginal inserts that provide progesterone. Vaginal suppositories are used twice a day; the gel is used once a day in the morning.

## **PHARMACY INFORMATION**

We will be happy to assist you in obtaining your medications and will send orders to the pharmacy of your choice. If you have a specific drug plan, please notify your nurse and the order will be sent.

### **MAIL ORDER:**

If you chose to purchase your medications through an infertility mail order pharmacy, please notify your nurse and the order will be sent. Major infertility pharmacies are:

Freedom Fertility Pharmacy	800-660-4283
Village Fertility Pharmacy	877-334-1610
Walgreens Specialty Pharmacy	800-424-9002

# MEDICATION PREPARATION

## **BRAVELLE/REPRONEX/MENOPUR/GONAL-F**

*(Needs mixing, single-dose preparation, store at room temperature)*

1. Wash hands thoroughly with soap and water.
2. Line up the number of vials prescribed and 1 vial of diluent (water).
3. Remove the plastic covers from the vials and clean the rubber tops with an alcohol wipe.
4. Remove a 3cc(ml) syringe with a 1 ½ inch needle from the wrapper, tighten the needle on the syringe.
5. Remove the protective cap from the needle. Push the needle into the diluent vial and pull back to the 1cc(ml) mark on the syringe.
6. Push the needle through the rubber stopper of the first medication vial and inject the diluent. Keep the needle in the vial and gently swirl it until the fluid looks clear. Do not shake.
7. Turn the vial upside down so that the fluid level is over the needle tip. Pull back on the plunger so that the fluid flows into the syringe. *MAKE SURE THAT THE SYRINGE IS FILLED TO THE PROPER LEVEL WITH FLUID AND NOT AIR.*
8. If multiple vials are prescribed repeat #6 and #7 with the same diluent filled syringe. Remove the syringe from vial and carefully put the needle cover over the needle.
9. If there is air in the syringe, remove it by holding the syringe with the needle straight up. Gently tap the syringe until the air is at the top. Carefully push the plunger in to remove the air.
10. Cover the needle and remove it from the syringe, then put the ½ inch needle on it.
11. Perform a **subcutaneous** injection (refer to the Administration of Medications section).

## **GONAL-F PEN**

*(Premixed pen, store at room temperature, store extra pens in the refrigerator)*

1. Wash hands thoroughly with soap and water.
2. Remove the pen cap and clean the rubber stopper at the end of the pen with an alcohol wipe. Attach a needle by twisting clockwise.
3. Dial your required dose to the black arrow.
4. Load the dose by pulling out the plunger as far as it will go. (Number on the last visible triangular red mark should match the dose number. If the dose number does not appear in red, there is not enough medication in the pen for the required dose. Either use a new pen or inject as much as is in the pen and use a new pen to get the rest.)
5. Perform a **subcutaneous** injection (refer to the Administration of Medications section).
6. After the injection, carefully cap the needle and remove it. If there is more medication in the pen replace the pen cap.

## **GONAL-F MULTIDOSE**

*(Needs mixing, multi-dose bottle, refrigerate after mixing)*

1. Wash hands thoroughly with soap and water.
2. Remove plastic cover from the vial and clean the rubber top with an alcohol wipe.
3. Remove sterile syringe, which is pre-filled with sterile bacteriostatic water, from the wrapper.
4. Remove the protective cap from the needle and push the needle through the rubber stopper. Inject the fluid into the vial. Remove the syringe and gently swirl the vial until the fluid looks clear. *Refrigerate after mixing.*

Preparing the dose:

1. Wash hands thoroughly with soap and water.
2. Clean the rubber top of the Gonal-f multidose vial with an alcohol wipe.
3. Remove the sterile syringe from the wrapper. Remove the protective cap from the needle and pull back the plunger to the required dose. The syringe will fill with air. *Do not touch the needle, it must remain sterile.*
4. Push the needle through the rubber stopper and inject the air into the vial.
5. Keep the needle in the vial and turn it upside down so that the fluid level is over the needle tip. Pull back on the plunger so that the fluid flows into the syringe to the dose.
6. If there is air in the syringe, gently tap the syringe. If this doesn't move the air bubbles, push the fluid back into the bottle and repeat step #5. *MAKE SURE THAT THE SYRINGE IS FILLED TO THE PROPER LEVEL WITH FLUID, NOT AIR.* Remove the syringe from the vial.
7. Perform a **subcutaneous** injection (refer to the Administration of Medications section).

## **FOLLISTIM PEN**

*(Multi dose cartridge, store at room temperature, store extra cartridges in the refrigerator)*

1. Wash hands thoroughly with soap and water.
2. Place a cartridge in the pen with the rubber stopper end going in first.
3. Clean the rubber stopper at the end of the cartridge with an alcohol wipe. Attach a needle by twisting clockwise.
4. Dial your required dose to the window.
5. Perform a subcutaneous injection (refer to the Administration of Medications section).
6. After the injection, check that the dose window shows "0". If it doesn't, the number in the window is the amount of medicine still needed. Insert a new cartridge and repeat #3, 4, 5.
7. After the injection, carefully cap the needle and remove it. If there is more medication in the pen replace the pen cap.

## **HCG (Ovidrel)**

*(Premixed, single-dose syringe, store at room temperature)*

1. Wash hands thoroughly with soap and water.
2. Remove the cover from the syringe and perform a **subcutaneous** injection (refer to the Administration of Medications section).

## HCG (Pregnyl, Novarel, generic)

*(Needs mixing, single-dose preparation, store at room temperature)*

Two vials: The first contains 10,000 International Units of HCG powder and the second contains 10cc(ml) of diluent (water).

1. Wash hands thoroughly with soap and water.
2. Remove the plastic covers from the vials and clean the rubber tops with an alcohol wipe.
3. Remove a 3cc(ml) syringe with a 1 ½ inch needle from the wrapper, tighten the needle on the syringe.
4. Remove the protective cap from the needle. Push the needle into the diluent vial and pull back to the 1cc(ml) mark on the syringe.
5. Push the needle through the rubber top of the medication vial and inject the diluent. Keep the needle in the vial and gently swirl it until the fluid looks clear.
6. Turn the vial upside down so that the fluid level is over the needle tip. Pull back on the plunger so that the fluid flows into the syringe. **MAKE SURE THAT THE SYRINGE IS FILLED TO THE PROPER LEVEL WITH FLUID AND NOT AIR.**
7. If there is air in the syringe, remove it by holding the syringe with the needle straight up. Gently tap the syringe until the air is at the top. Carefully push the plunger in to remove the air.
8. Perform an **intramuscular** injection (see Administration of Medications section).

## LUPRON

*(Premixed, multidose bottle, refrigerate after opening)*

**It is important that you NOT be pregnant while taking Lupron. To avoid this possibility, we ask that you use a condom or diaphragm starting the period before Lupron starts.**

***Please note:*** *When drawing up Lupron, dosages will be measured differently based on the syringe used.*

*We require the use of **low dose insulin syringes**. Directions and instructions are solely for use with these syringes and no others.*

1. Wash hands thoroughly with soap and water.
2. Remove plastic cover from the vial and clean the rubber top with an alcohol wipe.
3. Remove the sterile insulin syringe from the wrapper.
4. Remove the protective cap from the needle and pull back the plunger to the required dose. The syringe will fill with air.
5. Push the needle through the rubber stopper and inject the air into the vial.
6. Keep the needle in the vial and turn it upside down so that the fluid level is over the needle tip. Pull back on the plunger so that the fluid flows into the syringe to the dose.
7. If there is air in the syringe, gently tap the syringe. If this doesn't move the air bubbles, push the fluid back into the vial and repeat step #6. **MAKE SURE THAT THE SYRINGE IS FILLED TO THE PROPER LEVEL WITH FLUID, NOT AIR.**
8. Perform a **subcutaneous** injection (refer to the Administration of Medications section).

## **CETROTIDE**

*(Needs mixing, single-dose preparation, refrigerate)*

1. Wash hands thoroughly with soap and water.
2. Remove plastic cover from the vial and clean the rubber top with an alcohol wipe.
3. Remove sterile syringe, which is pre-filled with sterile diluent (water), from the wrapper.
4. Remove the protective cap from the needle, push the needle through the rubber stopper, and inject the fluid into the vial.
5. When medication dissolves, turn the vial upside down so that the fluid level is over the needle tip. Pull back on the plunger so that the fluid flows into the syringe. *MAKE SURE THAT THE SYRINGE IS FILLED TO THE PROPER LEVEL WITH FLUID AND NOT AIR.*
6. If there is air in the syringe, gently tap the syringe. If this doesn't move the air bubbles, push the fluid back into the vial and repeat step #5. Remove the syringe from vial and carefully put the needle cover over the needle.
7. Cover the needle and remove it from the syringe then put the ½ inch needle on it.
8. Perform a **subcutaneous** injection (refer to the Administration of Medications section).

## **GANIRELIX**

*(Premixed, single-dose syringe, store at room temperature)*

3. Wash hands thoroughly with soap and water.
4. Remove the cover from the needle and perform a **subcutaneous** injection (refer to the Administration of Medications section).

## **PROGESTERONE SUPPOSITORIES**

*(Store at room temperature)*

1. Remove the suppository from the packaging.
2. Insert in the vagina approximately 1 ½ inches with your finger.
3. Recline for 20-30 minutes after insertion.
4. It is suggested to wear a mini pad due to leakage of wax base.

## **CRINONE 8% GEL**

*(Store at room temperature)*

1. Remove the applicator from the packaging.
2. Twist off the tip to create an opening.
3. Insert the thin end of the applicator into the vagina in the morning.
4. Squeeze the box at the end of the applicator to deposit the medicine.
5. Remove the applicator.
6. It is suggested to wear a mini pad due to leakage of the gel.

# MEDICATION ADMINISTRATION

## INJECTION SITES

### Subcutaneous (SC)

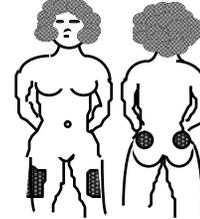
Bravelle Follistim  
Gonal-f  
Menopur Repronex

Ovidrel  
Lupron Ganirelix Cetrotide



### Intramuscular (IM)

hCG



## TECHNIQUES

1. Injection sites should be rotated daily.
2. Wash hands thoroughly with soap and water before preparing and giving the medicine.
3. Never touch the needles, they must remain sterile.
4. Make sure that the syringe is filled with medicine and not air (a tiny bubble of air is acceptable and will not cause problems).
5. Use syringes only one time, then throw away in a "sharps" container.
6. It is safe to administer as much as 2cc(ml) per IM injection and 1cc(ml) per SC injection.

## GIVING SUBCUTANEOUS (SC) INJECTIONS

1. Clean the injection site with an alcohol wipe by rubbing in a circular motion. Remove the needle cap.
2. Pinch the injection site with one hand. Using the other hand, quickly insert the needle straight in as far as it will go. Inject the medication by pushing the plunger down to empty the syringe.
3. Remove the needle. Rub the area in a circular motion to massage the medication. Dispose of the syringe in a "sharps" container. If you see blood or a small amount of fluid at the injection site, simply wipe the site with the alcohol wipe and apply light pressure.

## **GIVING INTRAMUSCULAR (IM) INJECTIONS**

1. Clean the injection site with an alcohol wipe by rubbing in a circular motion. Remove the needle cap.
2. Stretch the injection site with one hand and using the other hand, quickly insert the needle straight in as far as it will go.
3. Release the skin. With that hand draw back very gently on plunger; if no blood immediately flows into the syringe, inject the medication by steady pressure. If blood is seen when drawing the plunger up, the needle is probably in a vein - you must remove the needle and apply pressure to the needle site for 5 minutes. The injection can then be attempted at another site after putting on a new needle (repeat the draw back).
4. Remove the needle. Rub the area in a circular motion to massage the medication. Dispose of the syringe in a "sharps" container. If you see blood or a small amount of fluid at the injection site, simply wipe the site with the alcohol wipe and apply light pressure.

## **HINTS TO MINIMIZE DISCOMFORT**

1. Push the needle quickly through the skin.
2. Use room temperature diluent (water).
3. Put ice on the site for one minute before the injection.
4. Put a warm, wet washcloth on the site for 10 minutes after the injection.

# MONITORING INSTRUCTIONS

Women will have both vaginal ultrasound scans and blood tests. Please be on time as same day results are needed for physicians to evaluate the cycle.

Please follow these instructions during your monitoring phase:

1. Ultrasound exams will be done with a vaginal probe. This is done with an empty bladder. If you prefer a female ultrasound technician you may request it and if possible a female will perform the test (you may have a longer waiting period).
2. No appointments are needed during the week at BWH, 850 Boylston Street or Foxboro. Patients are taken on a first come first serve basis. Waiting times vary depending on how many patients are testing in a day.
3. On weekends/holidays you will be given a specific time to arrive in groups of 6-8. Patients are taken on a first come first serve basis.

## MONITORING AT BWH

### ULTRASOUND

1. Ultrasound hours
  - a. Weekdays: Arrive in ultrasound between 6:45a - 7:30a.
  - b. Weekends and holidays: Come in at your assigned time 7a-8:30a.
2. Ultrasound location - Ultrasound Department, level L-1  
From the main lobby at 75 Francis Street, take the elevators next to the revolving door down to L-1. Take a right off the elevator and see the sign for Ultrasound half way down the corridor on the left.
3. Ultrasound requisitions  
You will receive requisitions in the ultrasound department the first time you test. Hand one in each time you test. When you run low on requisitions inform your secretary or nurse to order more.

### BLOOD TESTS

1. Blood test hours
  - a. Weekdays: 7a – 9a if only blood test is ordered.
  - b. Weekdays: 7a - 8a in the ultrasound department if both blood and ultrasound are ordered.
  - c. Weekend and holidays: in the ultrasound department at your assigned time.
2. Blood drawing location
  - a. Ultrasound department, see above.
  - b. Weekday blood drawing only: from the main lobby at 75 Francis Street, take the elevators next to the revolving door up to the 3<sup>rd</sup> floor. Take a right off the elevator and follow signs to the OB/GYN clinics. The blood drawing lab is to the right of the OB/GYN reception desk.

### 3. Blood test requisition

You will be provided with a Standing Order Blood Test requisition. Show it to the phlebotomist on the first testing day. It will be good for a year. Always bring a copy of the standing order to the lab and tell the phlebotomist what test you are having.

### **SIGN-IN**

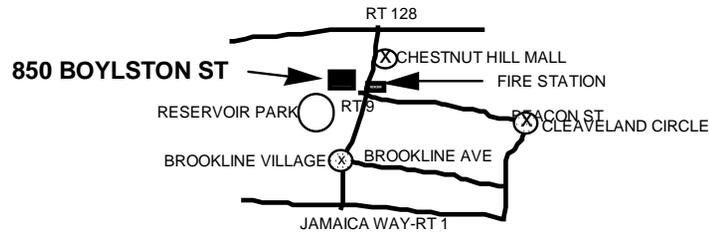
Patients are responsible for signing in, either in CIRS or the ultrasound department every day of testing. It is important to complete all the information on the sign-in sheet: your name, hospital number, phone number, physician's name, and whether a voice message can be left. If you forget to sign-in, call your nurse with this information.

### **DAILY INSTRUCTIONS**

1. At approximately 2pm each day physicians evaluate each individual patient's response the medications. Decisions are made about medication dosages and further testing.
2. Patients are then called with the results of the day and their new orders. Phone calls are usually finished by 5:30p. If you have not received a call by 5:30p call the F&E doctor on call at (617) 732-6660.

## MONITORING AT 850 BOYLSTON ST, ROUTE 9, CHESTNUT HILL

*NOTE: It is necessary to have testing on Pre-Op day done at Brigham & Women's Hospital.  
850 Boylston Street is only available for monitoring Monday – Friday.  
Testing on weekends and holidays will be done at BWH.*



### ULTRASOUND

1. Ultrasound hours: Arrive in ultrasound 7a – 8a.
2. Ultrasound location: 5<sup>th</sup> floor
3. Ultrasound requisitions

You will receive requisitions in the ultrasound department the first time you test. Hand one in each time you test. When you run low on requisitions inform your secretary or nurse to order more.

### BLOOD TESTS

1. Blood test hours: 7a – 8:30a
2. Blood drawing location: 1<sup>st</sup> floor
3. Blood test requisition

You will be provided with a Standing Order Blood Test requisition. Give it to the phlebotomist on the first testing day. It will be kept on file for a year. Always bring a copy of the standing order to the lab and tell the phlebotomist what test you are having.

### SIGN-IN

There are sign-in sheets in the Ultrasound Department at 850 Boylston Street, not in the lab. It is important to complete all the information on the sign-in sheet: your name, hospital number, phone number, physician's name, and whether a voice message can be left. If you forget to sign-in, call your nurse with this information.

### DAILY INSTRUCTIONS

1. At approximately 2pm each day physicians evaluate each individual patient's response to the medications. Decisions are made about medication dosages and further testing.
2. Patients are then called with the results of the day and their new orders. Phone calls are usually finished by 5:30p. If you have not received a call by 5:30p call the F&E doctor on call at (617) 732-6660.

## **MONITORING AT PATRIOT'S PLACE, FOXBORO**

*NOTE: It is necessary to have testing on Pre-Op day done at Brigham & Women's Hospital.  
Patriot's Place is only available for monitoring Monday – Friday.  
Testing on weekends and holidays will be done at BWH.*

Directions from the south: Interstate 95 North to Interstate 495 North; Exit 14A onto Route 1 North. Follow Route 1 approximately 4 miles to Patriot Place (on the right).

Directions from the north: Interstate 93 South (S.E. Expressway) to Interstate 95 South to Exit 9 (Wrentham) onto Route 1 South. Follow Route 1 South approximately 3 miles to Patriot Place (on the left).

### **ULTRASOUND**

1. Ultrasound hours: Arrive in the radiology department at 7:30a.
2. Ultrasound location: 1<sup>st</sup> floor
3. Ultrasound requisitions:

You will receive requisitions in the ultrasound department the first time you test. Hand one in each time you test. When you run low on requisitions inform your BWH secretary or nurse to order more.

### **BLOOD TESTS**

1. Blood test hours: 7a – 7:30a
2. Blood drawing location: 1<sup>st</sup> floor
3. Blood test requisition:

You will be provided with a Standing Order Blood Test requisition. Give it to the phlebotomist on the first testing day. It will be kept on file for a year. Always bring a copy of the standing order to the lab and tell the phlebotomist what test you are having.

### **SIGN-IN**

There are sign-in sheets in the blood drawing area. It is important to complete all the information on the sign-in sheet: your name, hospital number, phone number, physician's name, and whether a voice message can be left. If you forget to sign-in, call your nurse with this information.

### **DAILY INSTRUCTIONS**

1. At approximately 2pm each day physicians evaluate each individual patient's response to the medications. Decisions are made about medication dosages and further testing.
2. Patients are then called with the results of the day and their new orders. Phone calls are usually finished by 5:30p. If you have not received a call by 5:30p call the F&E doctor on call at (617) 732-6660.

# OVULATION INDUCTION (OI) CYCLE SUMMARY

**WHEN YOU GET YOUR PERIOD**, call your nurse (if you might get your period on a weekend call your nurse Friday).

**IF YOU DON'T CALL YOUR NURSE** but come in for a baseline ultrasound, remember to write the date of your period on your call-back sheet.

## **BASELINE ULTRASOUND DAY 2 OR 3.**

### **WHERE DO I GO FOR TESTING AT BWH?**

- Weekdays
  - 6:45-7:30a - Ultrasound Department L-1 for ultrasound and blood.
- Weekends/Holidays
  - 7:30-8a - Ultrasound Department L-1 for baseline ultrasound and blood. Assigned time when in cycle.

**A NURSE WILL CALL** you with your results, your medication orders, your next testing dates, and the tests required.

**DURING THE CYCLE** if you need medication refills contact the pharmacy.

### **HOW WILL I COMMUNICATE** with my nurse during the cycle?

- When you have testing, fill in a call-back sheet with:
  - Your name
  - Blue card number
  - Doctor's name
  - Phone numbers and whether voice mail messages may be left
- Testing will be evaluated daily between 12-3p.

### **WHAT IF I HAVE QUESTIONS?**

- Review this manual or the CIRS WEB site
- Write your questions on the daily call-back sheet
- Call your nurse to discuss:
  - Nurses are available during the week from 8a-4:15p
- For urgent matters at night or on weekends, our doctor on call is available at 617-732-6660; ask for the *F&E fellow on call*.

### **USUAL OI CYCLE**

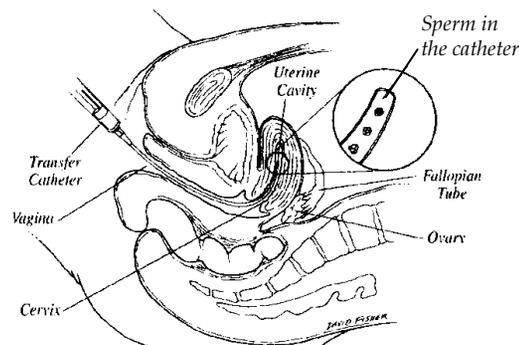
- Call with your period
- Ultrasound day 2 or 3
- Stimulation medications (average 7-14 days)
- Frequent ultrasounds and blood work
- HCG injection at midnight to trigger ovulation
- IUI 36 hours after the HCG injection or intercourse the following 2 days

# INTRAUTERINE INSEMINATION (IUI)

*The following is an outline designed to make IUI easy and understandable, however if you have questions you can always call your nurse for instructions.*

## THE PROCEDURE

IUI is a brief office procedure. Washed sperm from a partner/donor is placed directly into the uterus with a sterile tube (catheter). This is done in the Center for Infertility and Reproductive Surgery (CIRS) by one of our attending physicians. Before your first IUI you will be asked to sign a consent form. Read the consent form thoroughly to be aware of possible risks or complications.



IUI is performed through the cervix

*(Reprinted with permission of the American Society for Reproductive Medicine)*

The washing of the sperm is done at the Reproductive Endocrinology Laboratory, which is located on the 3<sup>rd</sup> floor of the Amory building and the IUI is done at CIRS.

## MONITORING/TIMING FOR IUI

While taking your injectable medications we will be monitoring you with blood tests and ultrasound. When it is determined that your follicle size and estradiol levels are appropriate, you will be given instructions to take the HCG injection at midnight. The IUI will be 36 hours later.

## SPERM BANKING

If needed, sperm banking is available. Please talk to your nurse for more details.

**DAY OF INSEMINATION** (IUI is not done on Thanksgiving, Christmas, and New Year's Day)

- Male partner - Sign-in at the Reproductive Endocrinology lab – 8am-9am
- Female partner – Sign-in at the Reproductive Endocrinology lab 11:30am

The insemination procedure takes approximately 10 minutes and is relatively painless. Following the IUI we ask that you remain lying down for about 10 minutes. After 10 minutes you are free to dress and leave. It is fine for you to go about your normal routine after an IUI.

## AFTER IUI

- A small amount of spotting or cramping is not unusual.
- Although unlikely, if you experience pain, fever, or any other symptoms that concern you, call your nurse so that we can determine if you need to be seen.
- If you have a full normal period, you may proceed to your next cycle. If no bleeding 14 days after your IUI, you can either do a home pregnancy test, or call us to set up a blood pregnancy test.
- If you have done two IUI cycles and are still not pregnant you should proceed on to a third cycle, but please make an appointment to follow up with your physician to discuss further treatment options.

## **RETROGRADE EJACULATION PATIENTS**

**Please note: we require that you abstain for at least 48 hours prior to ejaculation.**

1. One hour before sample collection, adjust the pH of your urine by taking 4 Alka-Seltzer tablets.
2. One-half hour before sample collection, drink a full glass of water and empty your bladder.
3. Perform sample collection.
4. After ejaculation, collect urine into a separate container.
5. Label the containers.
6. Submit both samples to the staff.

## **CANCELLATION**

### **WHY AN OI CYCLE MAY NEED TO BE STOPPED**

1. Poor response to the medication or there are too few follicles.
2. The estrogen level and the follicle development are not in line.
3. You have missed testing or instructions regarding your medication dose.
4. Ovulation occurs before the HCG injection.
5. Response to medication is too exuberant (very high estradiol and/or too many follicles). Sometimes these cycles can be changed to an in vitro fertilization (IVF) cycle instead of being cancelled.

# **POSSIBLE COMPLICATIONS OF OI/UI**

If you have concerns or any unusual symptoms, call your nurse Monday to Friday 8-4:15p  
All other times call the F&E Fellow on call at 617-732-6660

## **MULTIPLE PREGNANCY**

Because several follicles containing eggs can mature and ovulate at the same time, it can result in a multiple pregnancy. Thus multiple implantation of embryo can occur. Usually, the number of fetuses will be determined by ultrasound at 7-8 weeks gestation (5-6 weeks after the IUI). Fetal reduction may be possible in high order multiple gestation pregnancies.

## **OVARIAN HYPERSTIMULATION SYNDROME (OHSS)**

After the HCG injection the follicles that have ovulated can fill up with fluid and form cysts. This results in ovarian enlargement and can lead to lower abdominal discomfort and bloating. Other symptoms may include: nausea and vomiting, shortness of breath, weight increase 2-3 pounds a day, decreased urine output. These symptoms can occur within two weeks after the trigger shot. The symptoms usually resolve within 1-2 weeks without treatment. Pregnancy can worsen the symptoms of OHSS and make it last longer. In severe cases patients may be hospitalized for fluid management.

## **INFECTION AT THE INJECTION SITE**

Symptoms of injection site infection can include redness and/or extreme tenderness at the site and fever (rare). You may be instructed to apply warm soaks to the site and/or be given antibiotic treatment.

## **ECTOPIC PREGNANCY (TUBAL PREGNANCY)**

You will have 3 pregnancy tests 48 hours apart to rule out ectopic pregnancy. Approximately 3% of OI/UI pregnancies become ectopic and resolve on their own or are treated with medication or surgery. Symptoms may include abdominal pain and/or irregular bleeding.

## **OVARIAN TORSION (TWISTING)**

In less than 1% of cases, the enlarged ovary can twist on itself. This can decrease the blood supply to the ovary and result in significant lower abdominal pain. Surgery may be required to untwist or possibly remove the ovary.

## **MEDICATION SIDE EFFECTS**

Read the package inserts of your medications and discuss any possible side effects with your physician.

## **OVARIAN CANCER**

Some research has suggested that the risk of ovarian cancer may increase in women who take any fertility drugs over a long period of time. These studies had significant flaws. More recent studies have not confirmed this risk. A major risk factor for ovarian cancer is infertility itself, suggesting that early studies may have incorrectly attributed the risk associated with infertility to the use of medications.

# PREGNANCY TEST MONITORING

*Waiting to take the pregnancy is a difficult time. If you need extra support call your nurse or one of our social workers at 617-732-5500 x32214 or x31565.*

Pregnancy tests are scheduled 2 weeks after intercourse or IUI if there is no period.

If the test is positive, monitoring continues with at least 2 repeat pregnancy tests, then an ultrasound at about 7-8 weeks of the pregnancy.

If the test is negative, you may be able to have another OI cycle if you have been approved for more than one cycle. If you are not pregnant after 3 OI cycles you should make an appointment with your physician to discuss your treatment plan.

## ADDITIONAL INFORMATION

### SPERM AVAILABILITY ISSUES

If the male partner is unavailable due to travel or is concerned about the ability to produce a sample on the day of IUI, precycle sperm banking is available. This should be scheduled well in advance of the cycle start. Speak with your nurse and call the Reproductive Endocrine Lab at 617-732-7505 to arrange for sperm banking. Be aware that this is not always covered by insurance.

### OTHER MEDICATIONS

Please check with your physician prior to taking any additional medication during the cycle.

### RESEARCH

Brigham & Women's Hospital is always seeking to better understand and improve the therapies we offer. Therefore, we encourage patients to enroll in our research studies. We hope these studies will help us increase the chance of success in Ovulation Induction cycles. Whether or not you choose to consent to be a participant will **not** affect the quality of the care that you are given in any way.

### EMERGENCIES

If an emergency arises, please call the page Operator at 617-732-6660 and ask for the "F&E Doctor on-call". Stay on the line or leave a call back number and the physician will speak with you.

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## Notes