

IVF INJECTION CLASS

The ART Institute at WRNMMC

IVF Cycle Overview

- Pre-Cycle Suppression
 - ▣ Birth Control Pills / Luteal Lupron
- Baseline Appointment
 - ▣ Ultrasound / Estradiol
- Begin Stimulation Medications *day 1*
 - ▣ *Gonal-f* (FSH) & *Menopur* (LH/FSH)
- In-Cycle Ovulation Suppression
 - ▣ *Luteal Lupron* or *Microdose Lupron* or *Antagon*

IVF Cycle Overview...

- Cycle monitoring appointments
 - ▣ day4- blood draw, day6- blood/ultrasound, day7-10 possible blood/ultrasound daily
- Trigger Shot
 - ▣ *HCG or Lupron*
- Oocyte Retrieval Surgery
 - ▣ *doxycycline/ methylprednisolone/Percocet*
- Progesterone Supplementation
 - ▣ *Endometrin or Progesterone in Oil*
- Embryo Transfer
- Progesterone support x 8wks gest.

IVF Cycle timing

- Baseline – Retrieval ~2wks
- Baseline – Embryo transfer
~3wks

IVF Medications

- ❑ Medication protocol will vary with each patient
- ❑ Your injections are tailored to your needs

Pre-cycle suppression

Take active pills continuously until you are instructed to stop.

DO NO STOP PILLS UNTIL INSTRUCTED!!!

There are 21 active pills and 7 placebo pills per pack.

- ❑ Birth control pills (aka. BCPs or OCPs)
- ❑ Call with cycle day 1 of your period, we will have you begin BCPs on day 2 or 3
- ❑ You must be on BCPs a minimum of 2-3wks (max 6-7wks) prior to your baseline IVF appointment
- ❑ If you finish a pack of active pills begin a new pack
- ❑ In rare instances you may be unable to take BCPs, your nurse will advise you in these cases



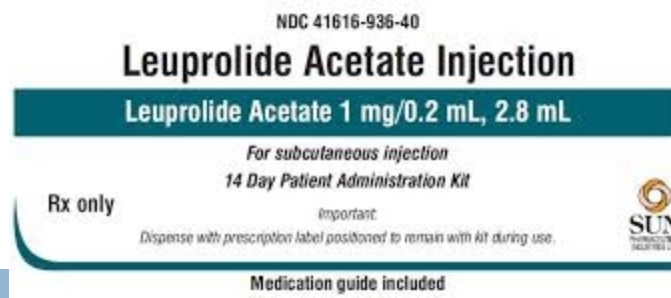
Which type of Ovulation suppression medication will I use?

- Your IVF Doctor will choose the type of medication for you
- Based on your infertility history and prescreening testing you will be prescribed either *Antagon*, *Microdose Lupron* or *Luteal Lupron*
- You will get your medication instructions & cycle calendar at your *Baseline Visit*

IVF sample Calendar (Antagon)

Sun	Mon	Tues	Wed	Thur	Fri	Sat
	Baseline – Blood & US 0645 @ GYN clinic Take last BCP	Take NOTHING today	Take NOTHING today	Cycle day 1- Start stimulation meds: Gonal-f & Menopur, as directed	Cycle day 2 Continue meds as directed	Cycle day 3 Continue meds as directed
Cycle day 4- Blood test only Continue meds as directed	Cycle day 5 Continue meds as directed	Cycle day 6- Blood/US Continue meds as directed	Cycle day 7 Possible Blood/US Continue meds as directed	Cycle day 8 Possible Blood/US Continue meds as directed	Cycle day 9 Possible Blood/US Continue meds as directed	Cycle day 10 Possible Blood/US Continue meds as directed
Cycle day 11- Tentative trigger day	Cycle day 12- Post HCG blood draw	Cycle day 13- Tentative retrieval day (2wks gestation)	Day1	Day2	Day3	Day4
Day5 Embryo transfer	Day6	Day7	Day8	Day9	Day10	Day11
Day12	Day13	Day14 Tentative pregnancy test (4wks gestation)				

Lupron



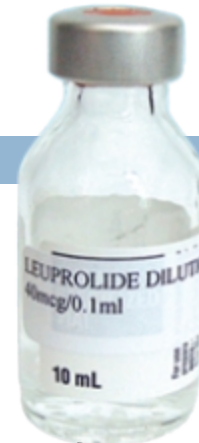
- Luteal Lupron – leuprolide acetate
 - Kit – insulin syringes & medication
 - Multi-dose vial
 - Given subcutaneously
 - Store at room temperature
 - Suppresses ovulation



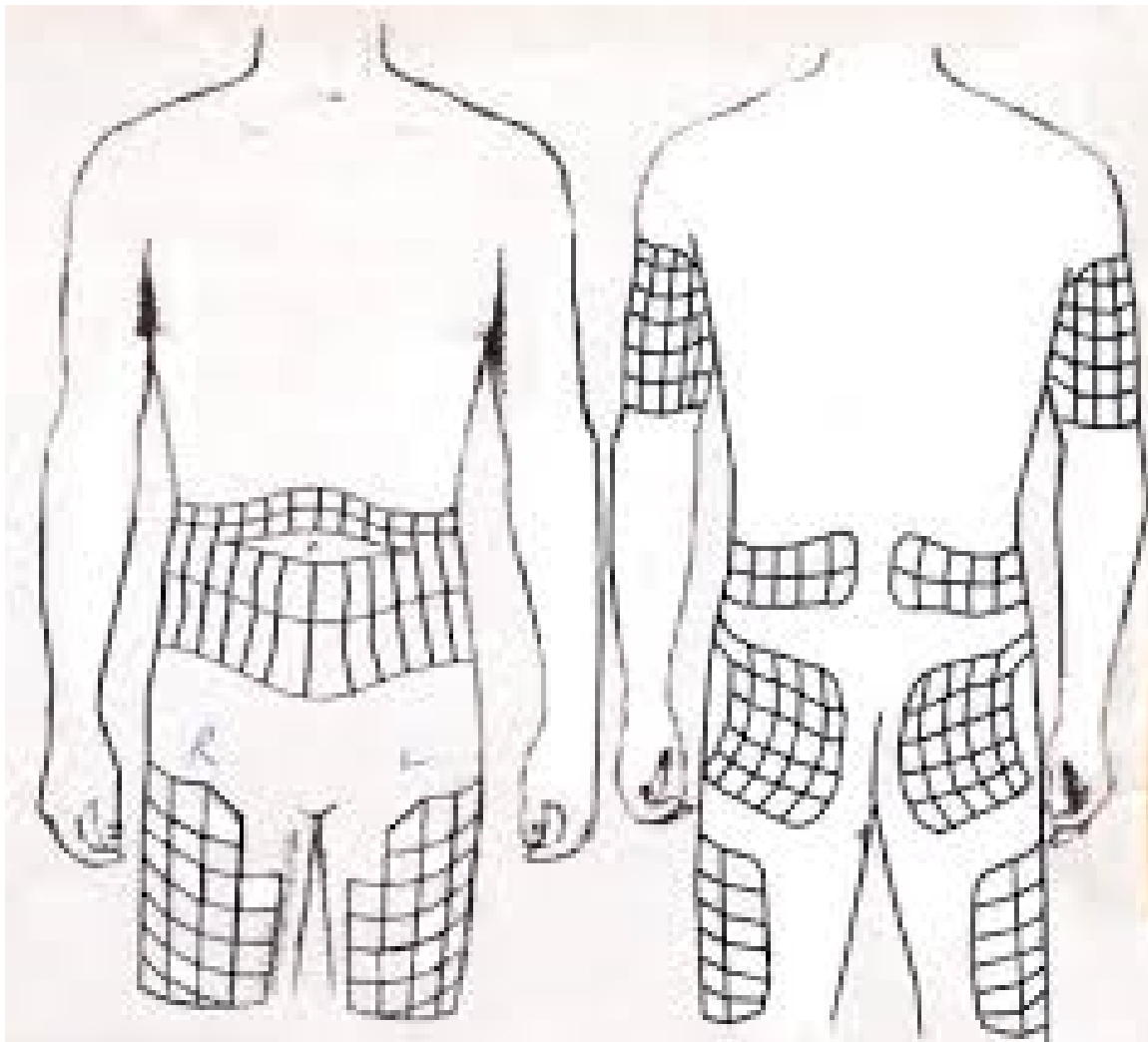
Microdose Lupron

□ MDF Lupron

- Multi-dose vial
- Given subcutaneously with insulin syringe
- Must be REFRIGERATED
- Suppresses ovulation
- Supplied by Walter Reed Pharmacy or Freedom Fertility Pharmacy @ 1800-660-4283



Subcutaneous Injections



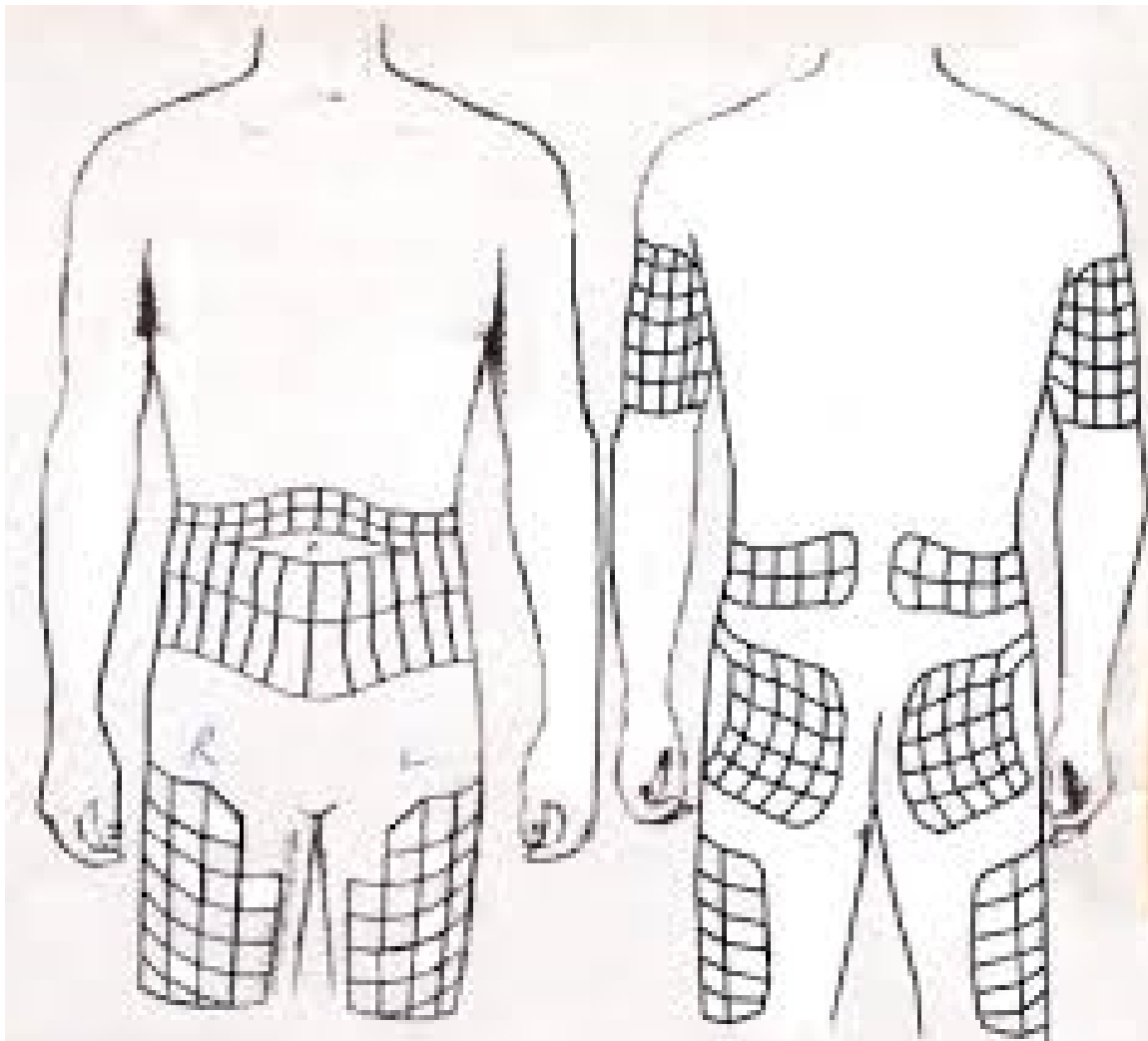
- Needle length about 1/2"
- Into the subQ tissue
- Pinch the tissue and insert needle at 90degrees

Gonal-f

- FSH – follicle stimulating hormone
 - Stimulates multiple follicle production
 - Multi-dose pen
 - Given subcutaneously
 - Refrigerate unused pens/ Once open store at Room Temperature up to 28days
 - 450 unit or 900 unit pens available
 - Keep track of amount used



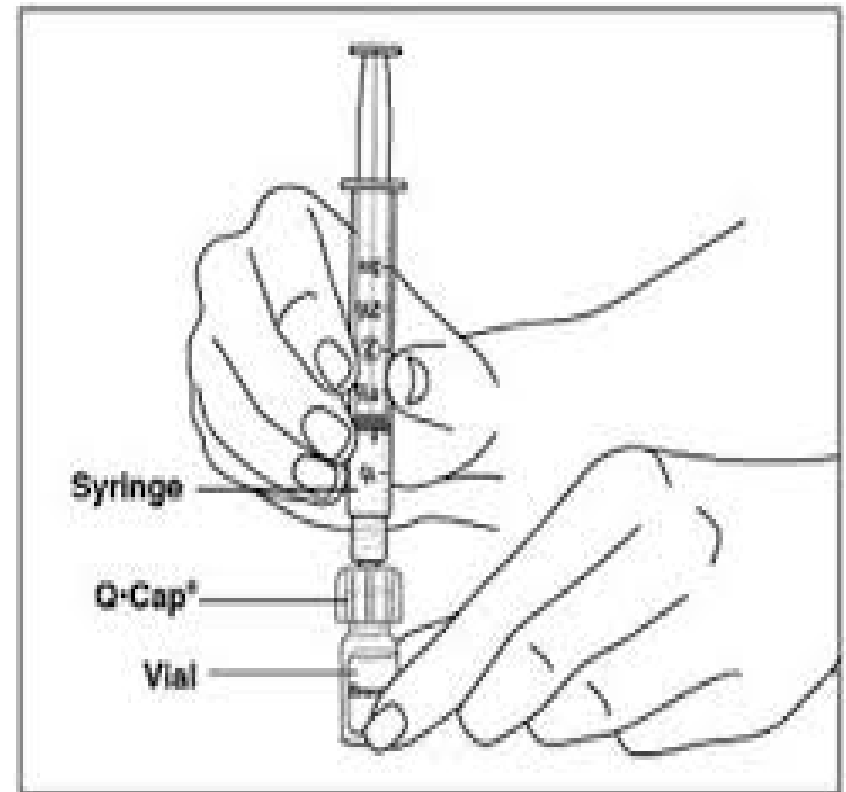
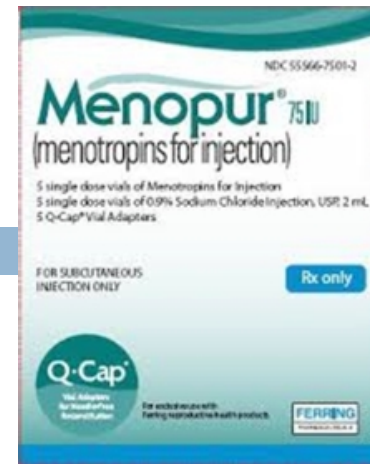
Subcutaneous Injections



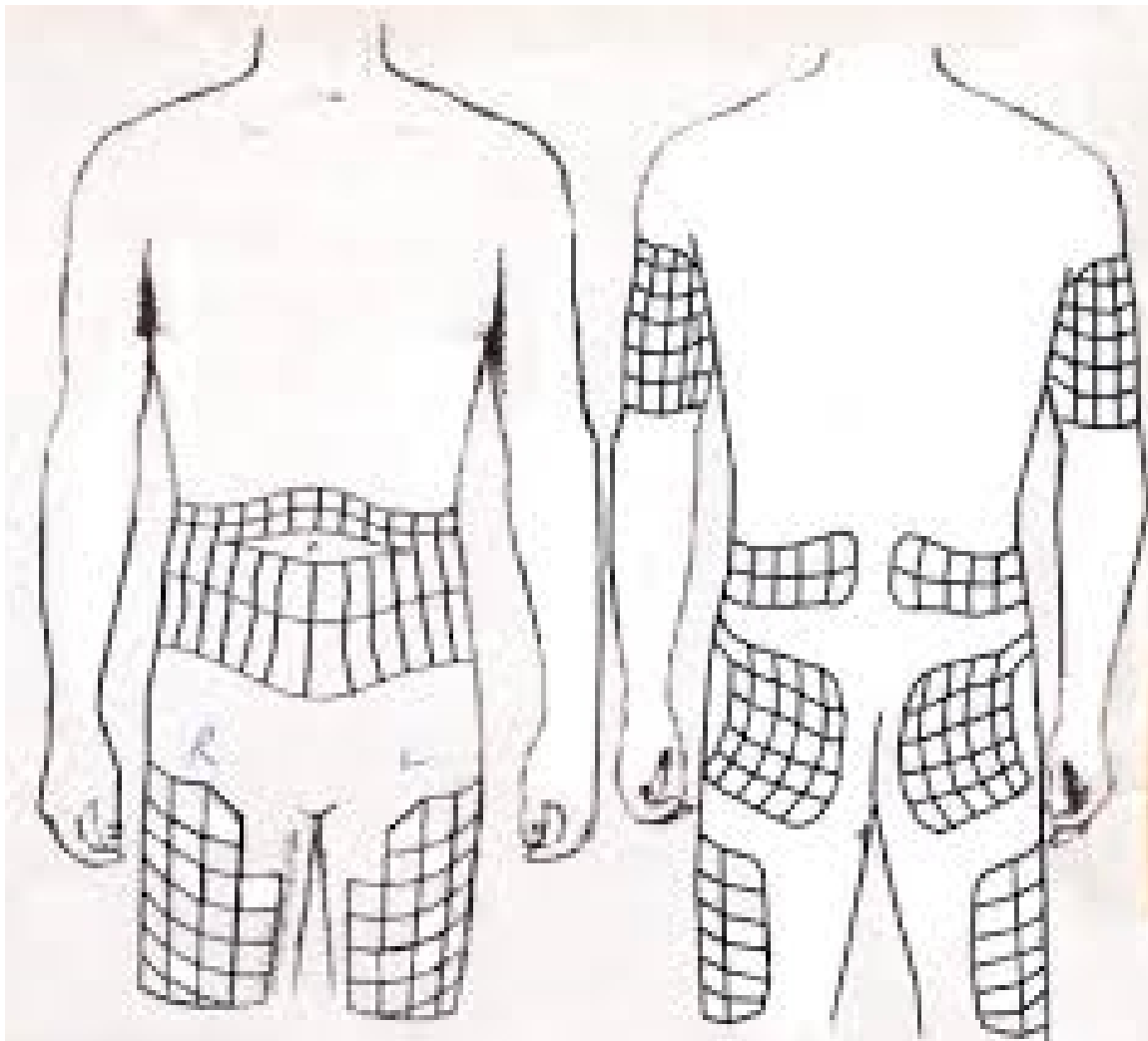
- Needle length about $\frac{1}{2}$ "
- Into the subQ tissue
- Pinch the tissue and insert needle at 90degrees

Menopur

- FSH & LH – follicle stimulating hormone and lutenizing hormone
 - ▣ Stimulates multiple follicle production & growth
 - ▣ Given subcutaneously
 - ▣ Must be reconstituted with 1 ml of NaCl
 - ▣ Store at Room Temperature
 - ▣ 1,2, or 3 vials – use *only 1 ml* of NaCl for mixing



Subcutaneous Injections



- Needle length about 1/2"
- Into the subQ tissue
- Pinch the tissue and insert needle at 90degrees

Antagon

- Ganirelix
 - ▣ Prevents ovulation
 - ▣ Normally started after day 6 of cycle
 - ▣ Prefilled syringe given subcutaneously
 - ▣ Continue daily @ 0800 until told to stop
 - ▣ Store at room temperature

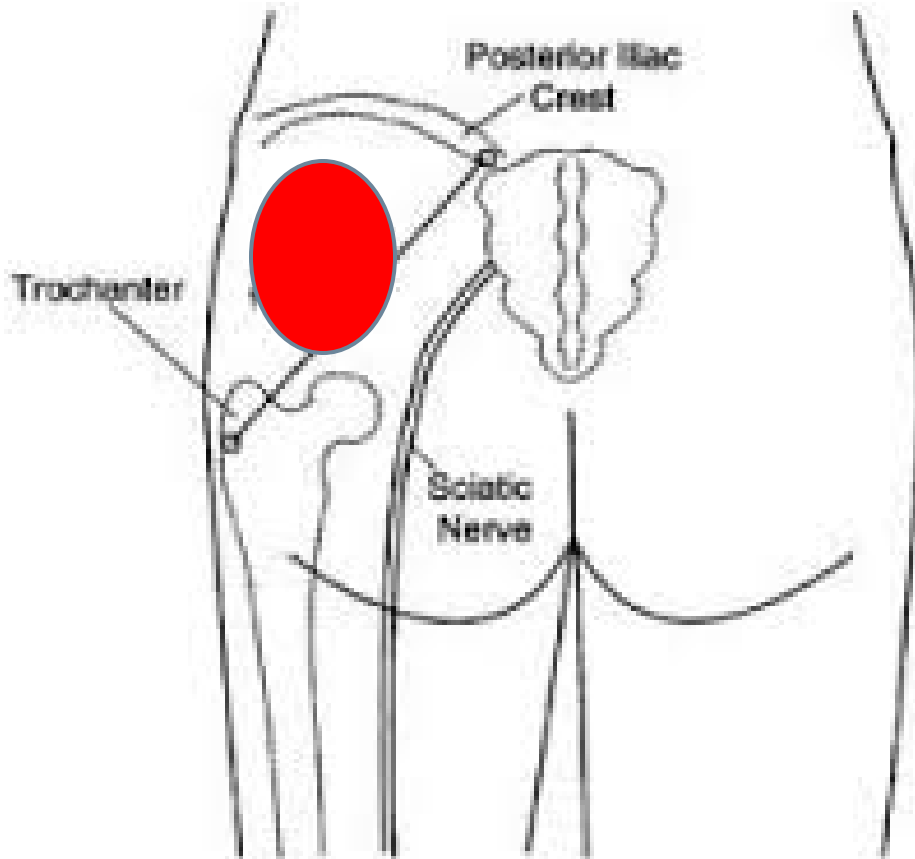


HCG trigger

- Human Chorionic Gonadotropin
 - Finalizes maturation of the oocyte
 - Allows the oocyte to release from the side of the follicle
 - Given IM- intramuscularly
 - Must be given at EXACT TIME as directed by physician
 - Must be reconstituted with 1ml of water
 - Must retrieve oocytes within 36 hours of injection
 - No more IVF medications
- Male partner – if you haven't had an ejaculate within 2-3 days, have an ejaculate the day of HCG trigger



Intramuscular Injection



- Needle length about 1 1/2 "
- Into the muscle
- Insert the needle at 90degrees
- Draw back to check for blood
- Redirect if necessary

Intramuscular injection alternate site

- The thigh:
 - ▣ Inject into the Vastus lateralis muscle

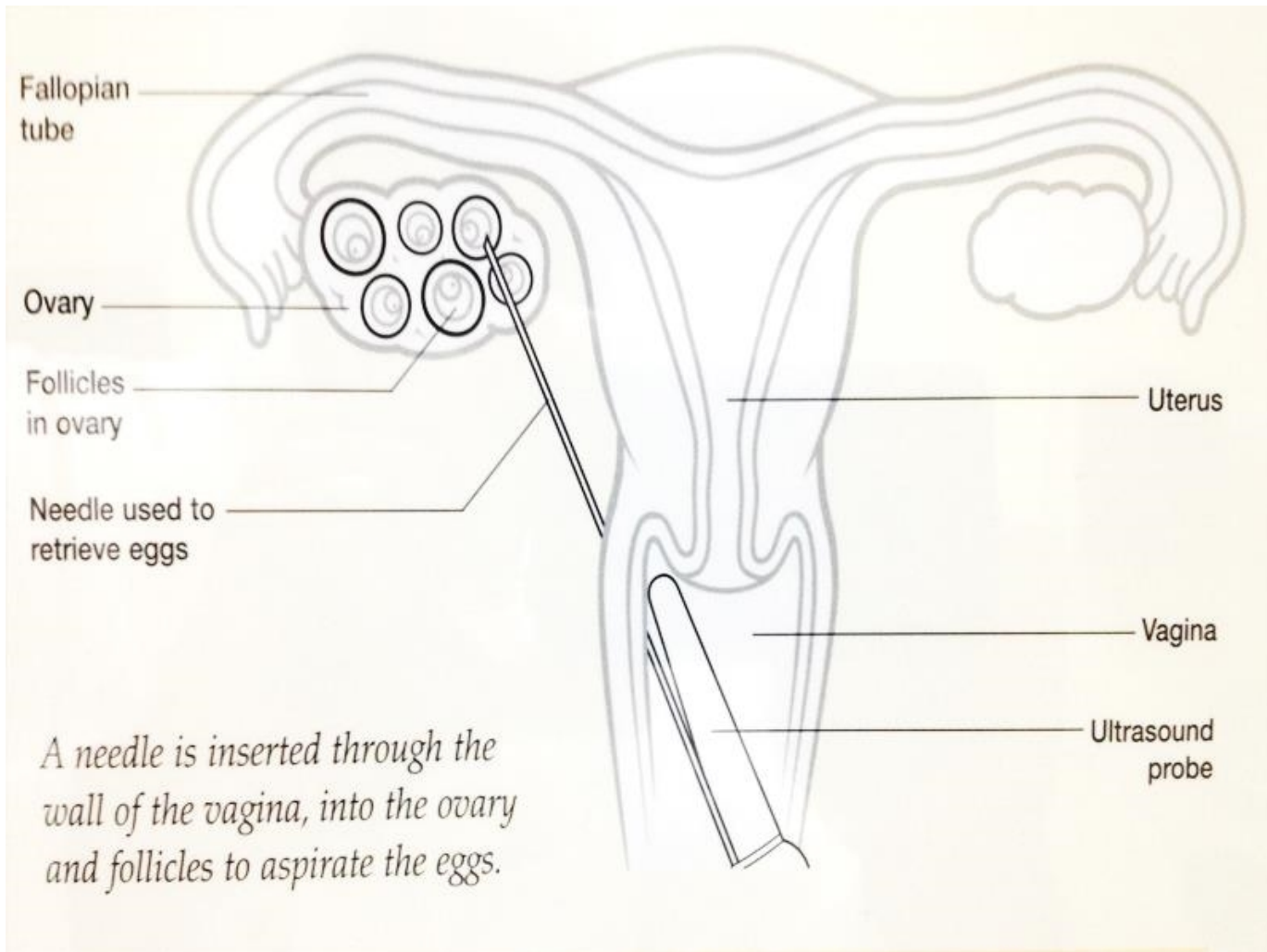


Lupron Trigger

- Alternative to an HCG trigger (if directed by MD)
- 80 units or 0.8ml of Lupron given subcutaneously
 - ▣ Finalizes maturation of the oocyte
 - ▣ Allows the oocyte to release from the side of the follicle
 - ▣ Must be given at EXACT TIME as directed by physician
 - ▣ Must retrieve oocytes within 36 hours of injection
 - ▣ No more IVF medications

- ▣ Male partner – if you haven't had an ejaculate within 2-3 days, have an ejaculate the day of HCG trigger

Oocyte Retrieval

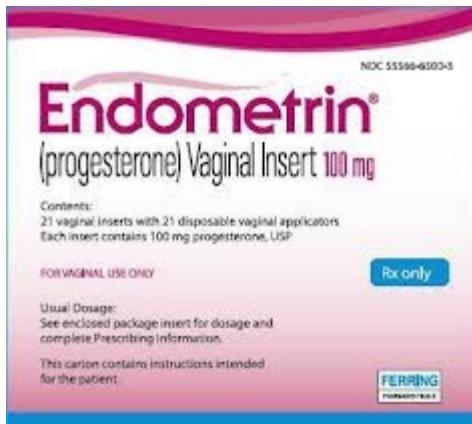


Post-Retrieval Medications

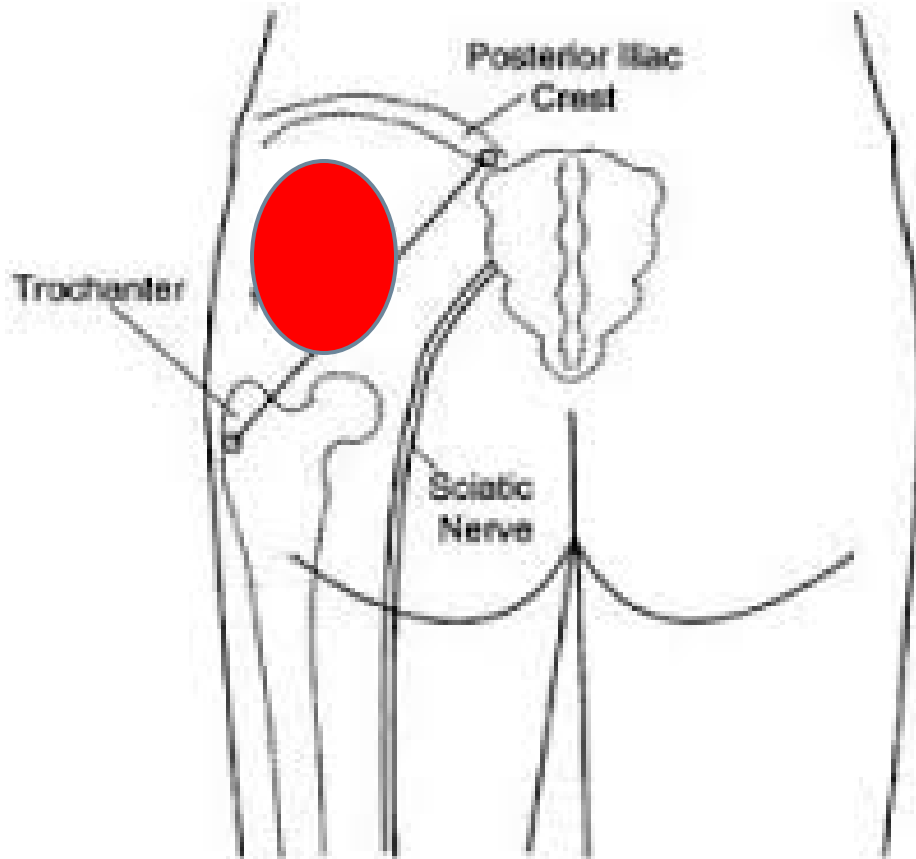
- Doxycycline
 - ▣ Antibiotic given as prophylaxis
- Methylprednisolone
 - ▣ steroid given in preparation for assisted hatching (day 1-4 after egg retrieval)
- Percocet
 - ▣ Narcotic pain relief

Progesterone

- Endometrin or Progesterone in Oil
 - ▣ Supplements progesterone *after retrieval*
 - ▣ Prepares uterine lining for implantation
 - ▣ Vaginal insert -vs- Intramuscular injection
 - ▣ Continue until 8wks of Gestation
 - ▣ Can cause constipation



Intramuscular Injection



- Needle length about 1 1/2 "
- Into the muscle
- Insert the needle at 90degrees
- Draw back to check for blood
- Redirect if necessary

OHSS

ovarian hyperstimulation syndrome

- This can be an **Emergency!**
- Ovaries are growing and becoming more vascular
- The vessels can becoming “leaky” causing fluid to leak into the abdomen
- Seek medical care or notify us if you have the following symptoms:
 - Rapid weight gain
 - Shortness of breath
 - Difficult or decreased urination
 - Nausea/vomitting
 - Low blood pressure

Embryo Transfer

The embryos are transferred into the uterus with ultrasound guidance.

You will be asked to fill your bladder prior to transfer.



FYI for the Ladies

In cycle-

- No NSAIDS- advil, motrin, aspirin, aleve
- Tylenol is OK
- No high impact exercise – running, horseback riding (walking, swimming are OK)
- No intercourse once stimulation meds begin

FYI for the Guys

To maximize sperm production we recommend:

- No saunas, hot tubs
- No supplements (testosterone, creatine, etc)
- Have an ejaculate every 3 days if possible
- If you smoke- STOP

Freedom Pharmacy 1-800-660-4283

[www.Freedommedteach.com](http://www.freedommedteach.com)

- Medication information/ videos- General Subcutaneous Injection-
http://www.freedommedteach.com/eng/videos.html?play=general_sq
- General Intramuscular Injection-
http://www.freedommedteach.com/eng/videos.html?play=general_im
- Gonal-F Redi-ject Pen-
http://freedommedteach.com/eng/videos.html?play=gonal_f_rff_rediject_pen
- Menopur-
http://www.freedommedteach.com/eng/videos.html?play=menopur_draw_up_qca
[p%2Cmenopur_sq](http://www.freedommedteach.com/eng/videos.html?play=menopur_sq)
- Antagon-
http://www.freedommedteach.com/eng/videos.html?play=ganirelix_acetate
- Lupron-
http://www.freedommedteach.com/eng/videos.html?play=leuprolide_acetate
- Lupron Trigger-
http://www.freedommedteach.com/eng/videos.html?play=leuprolide_trigger
- hCG- http://www.freedommedteach.com/eng/videos.html?play=novarel-hcg_draw_up%2Cgeneral_im
- Progesterone in Oil-
http://www.freedommedteach.com/eng/videos.html?play=progesterone_in_oil

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