Intrauterine Insemination (IUI)

What is “IUI”?
Intrauterine insemination is a two step process. First, the sperm must be separated from the seminal fluid, which contains many potentially irritating substances. The semen is collected via masturbation into a sterile specimen cup. In the lab it is combined with sterile media, and then spun in a centrifuge so that all the sperm accumulate at the bottom of the tube. The liquid is discarded and the sperm re-suspended in a small volume of media. Second, the sperm are drawn up into a small tube which is passed through the cervix into the uterus. The sperm are then deposited in the uterine cavity, and thus have a head start on their journey toward the egg.

Indications
Male factor infertility, endometriosis, cervical factor, and unexplained infertility are appropriate for IUI. Frequently treatment combines the use of “fertility drugs” such as Clomiphene Citrate with IUI.

Timing
The purpose of proper timing of IUI is to coordinate the meeting of the egg and sperm in the right place at the right time. Our goal is to inseminate as close as possible to the event of ovulation. Timing is crucial to the success of IUI. In our clinic, IUI is used in conjunction with several different therapies, each of which has a different timing protocol. Make sure that you follow instructions for timing that match your therapy.

LH indicator kit.
LH kits predict impending ovulation by detecting a rise in luteinizing hormone (LH) in the urine. A color change in the test kit indicates that you are “surging” and will ovulate in 24 hours. If you are using LH kits, call the office before noon on the day that you see a color change. You will be scheduled for an insemination the following day.

Ultrasound
LH timing and ultrasound are sometimes used together to determine when to inseminate frozen sperm. The ovary is scanned to see if the egg has been released from the follicle. If the follicle appears to be collapsing, IUI will be done immediately. If the follicle is
still present, IUI will be postponed until the afternoon. Ultrasound monitoring is critical to timing when therapy involves stimulation of the ovaries with Clomiphene.

**Clomiphene citrate/hCG**

Our clinic frequently uses Clomiphene (brand names Clomid, Serophene) to achieve mild ovarian stimulation and fine-tune ovulation. It is a prescription drug whose order must be called into your pharmacy every month you plan to use it. One tablet is usually taken for five days during the first part of the cycle. Your doctor will prescribe the exact regimen. On cycle day 11 or 12 an ultrasound is done to assess follicular development. When the follicle is at optimum size, an injection of human chorionic gonadotropin (hCG) is administered. hCG is a naturally occurring hormone which will induce ovulation 40 hours from the time of the injection. You and your partner should have intercourse the night you take hCG since normal sperm can live in the female reproductive tract for up to 72 hours. You return to the clinic approximately 40 hours, or a day and a half, after the hCG injection for insemination. If you live within one hour of the clinic you can collect the specimen at home. Just as for semen analysis, the semen should be collected into a sterile container by masturbation only. Use no lubrication when producing a specimen for IUI. If you live further away, plan to collect at the clinic.

**Adverse effects**

Any discomfort is usually minimal, comparable to getting a Pap smear. Occasionally patients experience spotting and mild cramping which will subside soon after the procedure is finished. It is extremely rare (less than 1% chance per cycle) for IUI to cause a pelvic infection. Should you have persistent cramping, abnormal discharge, lower abdominal tenderness with or without fever after an insemination, call the clinic immediately.

**Post-insemination instructions:**

1. Unless your nurse or doctor instructs you otherwise, there is no need to restrict activities or refrain from intercourse.
2. If your period is 2-3 days late, please call the phone nurse to arrange for follow-up.
3. If you get your period, please call the nurse to tell her the date it started. Letting us know the outcome of your cycle helps us give you better care.

**Scheduling**

1. All scheduling is done through the nurse: 847-1400.
2. Preparation of a fresh specimen requires about 20 minutes. If you collect your specimen at the clinic, add 10-20 minutes to allow the semen to liquefy. It takes 30 minutes to prepare most frozen specimens.
3. If you plan to collect on site, tell the nurse when you make the appointment. Arrive at the clinic 30 minutes prior to your appointment so that you will have plenty of time to collect the specimen.
4. If you are using an LH kit, call the day of your surge. You must call the clinic before noon on the day of your LH surge. You will get an appointment the following day.
5. If you are taking Clomid, make an appointment for your day 11 or 12 ultrasound. Your hCG injection and insemination will be scheduled at this visit.

If you have further questions about this procedure, do not hesitate to contact one of the nurses or the physician who has prescribed this therapy.