



Patient Information Sheet

Intrauterine Insemination (IUI)

Overview

Intrauterine insemination (IUI) can be used as a potentially effective treatment for infertility and is commonly recommended for infertility associated with endometriosis, unexplained infertility, anovulatory infertility, very mild degrees of male factor infertility, and cervical infertility. IUI is not indicated for patients with blocked or severely damaged fallopian tubes, very poor egg quantity and quality, ovarian failure (menopause), and severe male factor infertility.

IUI is a reasonable initial treatment that should be utilized for a maximum of about 3-6 months in women who are ovulating (releasing eggs) on their own.

Tubal patency (unblocked or open) should be demonstrated prior to performing insemination. This is usually done with an x-ray study called a hysterosalpingogram (HSG). IUI has little chance of working in women that are over 40 years old, in younger women with significantly elevated Follicle stimulating hormone (FSH) level on Day 3, or other indications of significantly reduced ovarian reserve. If the sperm count, motility or morphology is more that slightly low, insemination is quite unlikely to be successful. In that situation, In Vitro Fertilization (IVF) with Intracytoplasmic Sperm Injection (ICSI) is indicated and has high success rates.

Insemination is usually combined with a medication to stimulate more than one egg to develop. Ovarian stimulation with injectable medications (gonadotropins) provides better pregnancy rates and usually stimulates more mature eggs to developed as compared with clomiphene (oral medication). More mature follicles and eggs leads to a better chance for a pregnancy.

Process

1. You are given oral or injectable medication to stimulate oocyte production. The insemination is scheduled to coincide with ovulation.
2. We determine ovulation by either urinary Luteinizing Hormone (LH) testing for clomid or letrozole or by monitoring egg development by ultrasound.
3. A semen specimen is either produced at home or in our office by masturbation after 2-5 days of abstinence from ejaculation. The semen is washed to separate sperm from the other components of the semen
4. The separated and washed specimen consisting of a purified fraction of highly motile sperm is placed high in the uterine cavity using a very thin, soft catheter.
5. We will ask you to remain lying down for 10 minutes following the procedure,

The procedure is typically similar to a pap smear. There should be little or no discomfort. Some mild uterine cramping may occasionally occur.

Efficacy

Success rates for intrauterine insemination vary considerably and depend on the maternal age, type of ovarian stimulation used, duration of infertility, cause of infertility, number and quality of motile sperm in the washed specimen, and other factors. Success rates decrease for women over 35. They are much lower for women over 40. For this reason, we are more aggressive in older women.

For a couple with unexplained infertility; the female age 35 trying for 2 years whose partner has normal sperm, we would generally expect the following:

- a 5-8% chance per month of conceiving and delivering with clomiphene and intrauterine insemination for up to about 3 cycles (lower after 3 attempts)
- 15-17% chance per month of conceiving and delivering with injectable FSH (e.g. Follistim, or Pergonal) and insemination for up to about 3 cycles (lower after 3 attempts)
- 59% chance of conceiving and delivering with one cycle (month) of IVF treatment at our center (pregnancy rates vary between IVF clinics)

How many insemination cycles should be done?

Most pregnancies with insemination using a partner's sperm occur in the first 3-4 attempts. The chances for success per month drops off after about 3 attempts and continues to drop more after about 4-6 unsuccessful attempts. Therefore, this therapy is not usually recommended for more than 4-6 cycles. In vitro fertilization (IVF) is the next step in treatment after inseminations and has a much higher success rate per cycle.