PATH2 PARENTHOOD fact sheet

WHAT IS INTRAUTERINE INSEMINATION?

Intrauterine insemination (IUI) is a low tech form of assisted reproductive technology, which is typically performed in a doctor's office. When a woman or a couple begin infertility treatment, their health care professional may recommend Intrauterine insemination for several diagnosis of infertility, some of which include:

- Issues with cervical mucus
- Unexplained Infertility
- Ovulation problems, such as those that occur with polycystic ovarian syndrome (PCOS)
- Mild male factor infertility
- Mild endometriosis

Intrauterine insemination is not considered to be an effective treatment for:

- Blocked fallopian tubes or tubal damage
- Ovarian failure or lack of ovulation
- Significantly reduced ovarian reserve
- Advanced endometriosis
- Severe male factor infertility

Sometimes referred to as artificial insemination, IUIs are typically the first procedure utilized if a woman cannot conceive either naturally or with the use of fertility medications alone. IUIs can be done as a natural cycle without the use of any fertility medication, or with drugs such as clomid or injected gonadotropins[1]. You should discuss all of these options with your physician. IUI can be timed via ovulation induction protocols, as when the patient's ovulation is being monitored by her physician or, through the use of ovulation predictor kits that the patient utilizes at home[2].

If you have been prescribed infertility medication in conjunction with IUI, your physician will monitor your ovarian follicle growth (length and number of follicles) through the use of ultrasound and blood tests. This will determine not only your readiness for the procedure itself, but will help to reduce the risk of hyperstimulation to the ovaries.

Prior to beginning treatment, it is important that you discuss the possibility of multiples with your physician. The multiple birth rate women experience through Intrauterine insemination is increased when infertility medications are used[3].

To prepare for the procedure itself, a speculum will be inserted into the vagina and then a thin, flexible catheter, or tube, will be placed into the cervix. Washed sperm are then injected directly into the uterus with a syringe. The procedure is not uncomfortable for most women and takes less than five minutes from start to finish.

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Prior to the IUI (usually one hour before), a semen sample will be obtained. This can come from a sperm donor if there is no male partner in place, or if severe male factor infertility is the issue. An average total motile sperm count of 10 million is the standard threshold utilized when deciding if IUI with the male partner's sperm should be considered[4], or, if the couple should look at other options such as IVF with Intracytoplasmic sperm injection (ICSI), or donor sperm.

If the semen sample will come from the male partner, it will be collected prior to the IUI through ejaculation into a sterile container and then washed. Sperm washing refers to the laboratory technique which separates sperm from semen, and non motile sperm from motile sperm. The IUI procedure usually takes place quickly after sperm washing has been completed.

Timing of the IUI procedure is important; a window of 6 hours on either side of ovulation is the norm. If male factor infertility is the issue, some doctors will want to conduct the IUI after ovulation has already occurred[5]. If the woman has been given an hCG trigger shot, the IUI will take place around 36 hours after the injection has been administered.

Intrauterine inseminations are a relatively inexpensive treatment for infertility, when compared to In Vitro fertilization. However, it is important to discuss a realistic time plan for these procedures with your physician. Sometimes women get "stuck" attempting IUI month after month unsuccessfully. This can actually cost much more in the long run in terms of both time, emotional energy and money, than moving onto other types of treatment might prove to be. Of great importance here is the age of the patient, and the ticking of her biological clock.

There are a number of reasons why patients may not transition to IVF in a timely fashion, despite the fact that multiple studies indicate a statistically higher success rate through IVF than IUI across all diagnosis[6]. Sometimes, if male factor infertility is the issue, there may be resistance from the female partner about moving onto a more involved, time consuming high tech procedure, which requires higher amounts of infertility medication. In those instances, it may help to discuss your feelings about this with a therapist, or in a support group. Some women will opt to do natural IUI cycles or those with clomid many times instead. However, if this consistently does not yield conception, IVF with ICSI should be seriously considered by the couple as a viable alternative.

Discuss how many IUIs it makes sense for you to have with your physician during your initial consultation. Three to four attempts utilizing gonadotropins is what most doctors recommend, prior to suggesting that you consider moving onto other options.

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END NOTES

1. Advanced Fertility Center of Chicago, 13 July 2010, http://www.advancedfertility.com/unexplai.htm
2. The American Fertility Association Blog – IUI vrs. IVF: A Patient Guide, 13 July 2010, http://theafa.typepad.com/theafablog/2010/03/iui-vrs-ivf-a-patient-guide.html
3. Tomlinson MJ, Amissah-Arthur JB et al. 11 July 2010. Human Reproduction 11:9, 1892-6, Prognostic indicators for intrauterine insemination (IUI): statistical model for IUI success.
4. Van Voorhis BJ, Barnett M et al. 11 July 2010. Fertility and Sterility April, 75(4) 661-8, Effect of the total motile sperm count on the efficacy and cost-effectiveness of intrauterine insemination and in vitro fertilization.
5. Fertility Plus. 14 July 2010. http://www.fertilityplus.org/faq/iui.html
6. Chambers GM, Sullivan EA et al. 14 July 2010. Journal of Obstetrics and Gynecology, 2010 Jun; 50(3), 280-8, Is in vitro fertilization more effective than stimulated intrauterine insemination as a first-line therapy for subfertility? A cohort analysis.

BIBLIOGRAPHY

"Artificial insemination for infertility, Intrauterine insemination – IUI." Available at: http://www.advancedfertility.com/insem.htm. 1 July 2010.

Bensdorp AJ, Slappendel E et al. "The INeS study: prevention of multiple pregnancies: a randomized controlled trial comparing IUI COH versus IVF SET versus MNC IVF in couples with unexplained or mild male subfertility." Available at: http://www.ncbi.nlm.nih.gov/sites/pubmed. 12 July 2010.

Chambers GM, Sulllivan EA et al. "Is in vitro fertilization more effective than stimulated intrauterine insemination as a first-line therapy for subfertility? A cohort analysis." Available at: http://www.ncbi.nlm.nih.gov/sites/pubmed. 1 June 2010.

"Frequently Asked Questions About Intrauterine Insemination (IUI)". Available at: http://www.fertilityplus.org/faq/iui.html. 11 July 2010.

Gurevich, Rachel. "What is IUI?" Available at: http://infertility.about.com/od/infertilitytreatments/a/what_is_IUI.htm. 1 July 2010.

Huang HY, Less CL et al. "The impact of the total motile sperm count on the success of intrauterine insemination with husband's spermatozoa." Available at: http://www.ncbi.nlm.nih.gov/sites/pubmed. 10 July 2010.

"IUI or IVF? Fertility Forums". Available at: http://forums.fertilitycommunity.com/intrauterine-insemination-iui/274376-iui-ivf.html. 13 July 2010.

"IUI to IVF Transition Message Board at LIFamilies." Available at: http://www.lifamilies.com/chat/topic-539539-1.html. 12 July 2010.

Shapiro, Daniel. "IUI vrs. IVF – a Patient Guide." Available at: http://theafa.typepad.com/theafablog/2010/03/iui-vrs-ivf-a-patientguide.html. 13 July 2010.

Tomlinson MJ, Amissah-Arthur JB et al. "Prognostic indicators for intrauterine insemination (IUI): statistical model for IUI success." Available at: http://www.ncbi.nlm.nih.gov/sites/pubmed. 9 July 2010.

"Unexplained Infertility Background, Tests and Treatment." Available at: http://www.advancedfertility.com/unexplai.htm. 14 July 2010.

Van Voorhis BJ, Barnett M et al. "Effect of the total motile sperm count on the efficacy and cost-effectiveness of intrauterine insemination and in vitro fertilization." Available at: http://www.ncbi.nlm.nih.gov/sites/pubmed. 1 April 2001.

Whelan, Corey "What is Intrauterine insemination?" Available at: http://www.examiner.com/x-24753-Infertility--Miscarriage-Examiner-y2010m7d11-What-is-Intrauterine-insemination. 12 July 2010.

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