



OI-IUI

Ovulation Induction with

Intrauterine Insemination: Information for patients



Westmead Fertility Centre

Introduction

This treatment combines stimulation of ovulation (using a low dose of an injectable fertility drug) with artificial insemination of the partner's semen into the uterus. The use of the fertility drug helps to ensure complete growth of the egg. Release of the egg (ovulation) can also be controlled more precisely to coincide with the time of insemination.

This treatment has been available for a long time but it is only recently that sufficient research has been carried out to prove that it offers a useful and less invasive alternative to IVF. It is only useful for couples where the subfertility is unexplained or where there is mild endometriosis. This treatment is not appropriate when there is damage to the fallopian tubes or when there are abnormalities in the sperm. In these circumstances, treatment with some form of In Vitro Fertilization (IVF or ICSI) is a much more effective option.

Ovulation Induction (OI)

A low dose of fertility drug is given by injection starting on cycle days 4-6. The fertility drug (called Gonadotropin Releasing Hormone (GnRH) agonist or Puregon) is a highly purified form of the naturally occurring female hormone called follicle stimulating hormone. There are no artificial chemicals or compounds in the fertility drug so the only expected side-effects are those that result from an over-sensitivity to the natural effects of the female hormone (see below).

Injections are usually required for about 10 days. The injections are given under the skin of the abdomen or thigh once a day. In order to minimise the number of times you need to visit the Fertility Centre, we will show you how to give the injections to yourself. This may seem difficult or impossible to you at first, however we have found that most women find it very easy to do their own injections at home after being given instruction.

Your response to the fertility drugs is very closely monitored by blood tests and ultrasound scans. You will be required to have an initial "baseline" blood test prior to starting treatment. Thereafter you will need to have a blood test on the fifth or sixth day of the injections and then every two or three days until your hormone level starts to rise. You may then need to have blood tests every day until an ultrasound scan is performed. The number of blood tests required varies between women and even from one cycle to another in the same woman. Most women need only 4 or 5 blood tests and one ultrasound scan. Ultrasound scans are performed, by putting a small ultrasound probe into your vagina. You do not need a full bladder for this scan.



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When the ultrasound scan shows that one follicle (the bag of fluid surrounding an egg) in the ovary has grown to 17 mm or above the egg is considered to be mature and ready to be released (ovulated). An injection of a second female hormone called human chorionic gonadotrophin (or natural pregnancy hormone) is then used to trigger ovulation. This trigger injection has the commercial name of Pregnyl and is given under the skin of the abdomen by the fertility nurses.

This injection takes approximately 36 hours to trigger release of the egg. The artificial insemination is done approximately 24 - 36 hours after the injection to ensure that there are adequate numbers of sperm in the woman's body at the time of egg release.

WARNING

The fertility drugs may cause too many eggs to grow to maturity thus creating the risk of a multiple pregnancy occurring. It is therefore our policy that if three or more mature follicles are seen on ultrasound scan, the artificial insemination will be cancelled and you will be strongly advised to use effective contraception for the remainder of the month.

Intrauterine Insemination (IUI)

Timing and Semen Collection.

One insemination is performed approximately 24 -36 hours after the trigger injection is given.

On the morning of insemination, the male partner will be required to produce a semen sample by masturbation. It is preferable to produce this sample at home, although there is a special "collection room" located next to the Andrology laboratory if this is not possible. The sample must be collected **on the morning of the insemination and must be delivered to the laboratory at the appointed time (usually 8am)**. If you wish to deliver your sample prior to 8am you may "drop it off", but the locked laboratory is not staffed before that time. Dropped off samples should be placed with your pink request form through the hole in the door. Please make sure your sample is clearly labelled with your name and date of birth. **Semen samples should be kept at room temperature – please do not refrigerate!**

The semen sample has to be prepared in the laboratory so that it is suitable for insertion into the uterus (womb). Only 'clean' motile sperm enter the uterus after normal intercourse, as the mucus in the cervix acts as a filter. For artificial insemination into the uterus, the semen sample must therefore be cleaned, filtered and concentrated in the laboratory prior to use.



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Insemination Procedure

The insemination procedure is normally no more uncomfortable than a Pap smear. A speculum is used to part the vaginal walls so that the cervix (neck of the uterus) can be seen. A thin catheter attached to a small syringe is used to gently inject the sperm into the uterus. You will be asked to remain lying down for 15-20 minutes following the insemination. After that, you may return to your normal daily activities.

Seven days after the insemination you will need to return for another blood test to confirm that ovulation has occurred. If the cycle was unsuccessful, a period would be expected 14 days after insemination. If your period has not commenced 16 days after insemination, a pregnancy test will be done.

If a pregnancy has not occurred after 4 cycles you will be required to have a follow up appointment with your fertility specialist to review treatment options.

What are my chances of pregnancy?

Current literature reports a 15% chance of pregnancy for each cycle of treatment. Many variables will affect your chance of pregnancy. Female age, duration of subfertility and whether or not there have been any previous pregnancies are particularly important.

What complications are there?

The following adverse effects may occur.

Multiple pregnancy. Although we strive to avoid this by careful cycle monitoring, the risk of multiple births (i.e. twins or greater) is still increased by this treatment.

Ovarian hyperstimulation syndrome (OHSS). This is a condition where many follicles grow on the ovaries causing them to become larger than normal and to secrete large amounts of fluid. This may cause severe abdominal swelling. Because low doses of drug are used in this treatment programme, OHSS is an uncommon side-effect.

Long term effects? There has also been considerable discussion about the long term effects of fertility drugs on the risk of cancers such as cancer of the breast or ovary. Careful research is still going on to investigate this possibility. So far, no effect of fertility drugs on the risk of either of these cancers or other health problems has been found.

Costs of treatment

All the cost details for this treatment are detailed in the accompanying booklet (Costs of Treatment: Information for patients), You will be asked to pay the secretary at the Fertility Centre the patient contribution to this cost **before** commencing an OI-IUI cycle. The remainder of the cost is covered by Medicare and you will be asked to complete a Medicare claim form at the time of each insemination.



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VERY IMPORTANT NOTICE Costs of medication

The medication for your treatment is supplied by Medicare. **However, according to strict Medicare rules, these medications are only supplied if an actual insemination is carried out.** Medicare makes no provision to pay for a treatment cycle of OI-IUI that is cancelled before insemination is completed. If no insemination is carried out you may be liable for the whole cost of the drug in addition to the costs of treatment outlined elsewhere. The cost of such medication can range from \$400 to \$1000 depending on the duration of treatment. By careful monitoring of your cycle, we seek to ensure that this situation never arises but you must be aware that you could be liable for the cost of the medication. Full details are available on request. You should discuss this with your doctor before commencing treatment.

Counselling

The nursing, scientific and medical staff are available to answer any questions and discuss any problems which may arise before, during and after treatment. A qualified counsellor is also available on request within the unit, from Monday to Thursday.

Support group

We encourage you to join the Australian infertility support group "**ACCESS**". This gives you an opportunity to meet others with similar problems and to gain further knowledge about infertility treatments. The group produces a newsletter and holds meetings to discuss various infertility-related topics with guest speakers.

ACCESS

Phone: 1800 888 896

Web address: www.access.org.au



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Suggested reading:

If you would like to read further, here is a short list of books. They can be borrowed from the WISH library, purchased from "Healthlink" on level 2 at Westmead Hospital, or from any good bookshop.

Getting pregnant A Compassionate Resource To Overcoming Infertility

Robert Jansen
Allen & Unwin St Leonards NSW 1997

The Infertility Handbook: A guide to making babies

Jacqueline Tomlins
Allen & Unwin St Leonards NSW 2003

Why me: The Real-life Guide to Infertility

Loraine Brown
Simon & Schuster Roseville NSW 1998

The Chance of a Lifetime: Infertility and IVF

Dettman and Saunders
Penguin Books 1987 ISBN 0-14-010069-5

When the Dream is Shattered

Judith & Michael Murray
Lutheran Publishing House 1988

Healing the INFERTILE Family.

Gay Becker
Bantam 1990

The Time In Between: Motherhood Grief

Jan Hill
Umpire Times Press 1991

Baby Making: The Technology and Ethics

Susan Downie
The Bodley Head ISBN 0-370-31136-1

Getting Pregnant: A Guide for the Infertile

Derek Llewellyn-Jones
Melbourne. Ashwood House Medical. 1990

Coping With Grief

Mal MsKissock and Dianne MsKissock
Sydney. Australian Broadcasting Corp. 1995

The Long-Awaited Stork: A Guide To Parenting After Infertility

Ellen Sarasohn Glazer
Jossey-Bass Inc San Francisco 1998

The Infertility Book: A Comprehensive Medical & Emotional Guide

Carla Harkness
Celestial Arts Publishing California 1992

The Child Within: surviving the Shattered Dreams of Motherhood

Linda Fisk
Hill of Content Publishing 2001

Battles with the BABY GODS INFERTILITY:

Stories of Hope
Amanda Hampson
Doubleday Moorebank NSW 1997

Infertility All your questions answered.

Carl Wood and Gab Kovacs
Hill of Content Publishing 1996

Infertility: A Guide for the Childless Couple

Eck Manning B
Prentice Hall 1977

IVF: In Vitro Fertilisation

Carl Wood & Robyn Riley
Hill of Content 1992 ISBN 0-855-72-212-6

Surviving Infertility: Compassionate Guide Through the Emotional Crisis of Infertility

Linda Salzer

Loss of a Baby: Understanding Maternal Grief

Margaret Nichol
Bantam ISBN 0-947189-49-1

Endometriosis: An Enigma

Lorraine Smith
I and K Press Pty Ltd. 1989

When your womb is empty

Anita Henry-Peiris
AJ Publications WA 1998

Patient letters. Personal experiences of IVF

IVF Friends Inc. 1995