

Intrauterine Insemination

A Guide for Couples

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Many women and couples will face a choice about fertility treatment. Intrauterine insemination (IUI) is one option in this setting. IUI is typically used when there is no obvious cause for a fertility delay – the fallopian tubes are not blocked, and the sperm is normal or almost normal. This situation is commonly termed ‘unexplained infertility.’ Because the sperm and egg meet and fertilize in the fallopian tube, it is of no value where there are tube or sperm problems.

Despite IUI having been used in fertility treatment for many decades, the scientific evidence underpinning its use is somewhat difficult to interpret.

When all of the scientific evidence was put together, Cochrane researchers concluded that there is little difference in the pregnancy rate between trying naturally and using IUI, making the chances little different.

What is clear from studies is that for IUI to be effective, it must be used with hormonal stimulation rather than just in a natural cycle.



Difficulties in finding and interpreting the scientific evidence have led different groups to make different recommendations. For example, the British NHS recommends using IVF rather than IUI in prolonged unexplained infertility. However, in a recent review of new evidence, one author* reached the following conclusion:

“It’s obvious that we are over-using IVF to treat unexplained infertility... evidence-based data clearly indicate that promoting IVF... ignores the advantages of IUI completely in the case of unexplained and mild male factor infertility.”

*Ombelet. The revival of intrauterine insemination: evidence-based data have changed the picture. *Facts Views Vis Obgyn* 2017; **9** (3): pages 131-132.



What happens during an IUI treatment?

A daily injection...

The injections of FSH used in an IUI treatment cycle are very low dose – just enough to stimulate the development of a single egg.

A few days after the period begins, a **daily injection** is given. Most women will need between seven and ten injections over the course of an IUI cycle.



Checking your response...



To minimise the chance of a multiple pregnancy, while still maximising the chance of a baby, careful attention must be paid to the response to the injections. This will involve **blood tests** – to confirm that hormone levels are appropriate, and to make sure that ovulation does not occur unexpectedly and before treatment.

Avoiding a multiple pregnancy is an important aim of insemination treatment. To achieve this, it is important to use **ultrasound** to carefully follow the development of the follicle in the ovary, and to confirm that there is only one follicle.



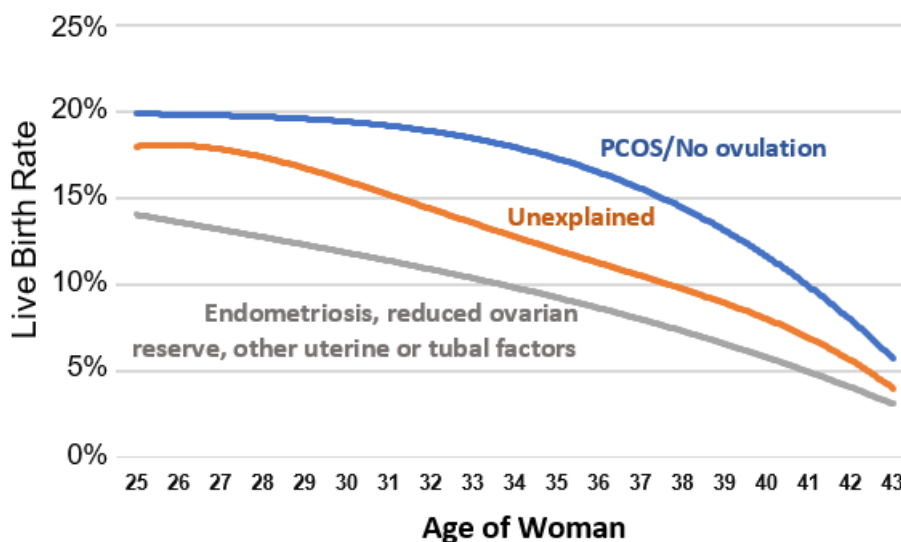
Treatment day

Once the follicle is mature, a triggering injection is given to bring about release of the egg. A specimen of sperm is washed and concentrated, then placed in the upper part of the uterus with a fine catheter. After the treatment, **progesterone pessaries** may be used.



How effective is IUI?

The chance of taking a baby home from a single cycle of treatment depends upon the underlying cause of the fertility delay. The graph below shows the typical chance of taking a baby home ('live birth rate') with each IUI cycle of treatment according to the **age of the woman**, and the **reason for the fertility delay**.



Choices...

For some causes of a fertility delay – blocked tubes, or a significant sperm problem, for example – the only treatment that is likely to lead to pregnancy is IVF. However, when there is 'unexplained infertility,' or minor problems with ovulation or sperm, there is a choice of trying naturally, looking to IUI, or moving to IVF treatment. Each case is different, and decision-making is largely a matter of individual preference.

In a nutshell

IUI is a fertility treatment in which injections are used to bring about the development and release of a single egg. Because fertilization occurs in the fallopian tubes, the sperm must be normal, or close to normal, and the fallopian tubes must be healthy. The chances of taking a baby home from each treatment of IUI are less than IVF, but possibly more than trying naturally. The choice of treatment is very much that of the couple having treatment.

