
Male Infertility: Case Study

Introduction

Ben and Sarah had tried to conceive for months, but couldn't, as Ben's sperm was not sufficiently motile. This means his sperm could not effectively move towards the egg. To combat this problem, the couple tried IUI, which in summary, is a non-surgical fertility procedure, in which a sperm sample is inserted into the uterus. It is usually quick and painless, typically taking around 3 minutes to execute. The aim of an IUI is to increase the amount of sperm that reach the fallopian tubes, consequently increasing the possibility of fertilization. Using this method, Ben's sperm were given an advantage by providing them the head-start they needed, however the procedure was still dependent on his sperm reaching the egg and fertilizing it on their own. Some moral issues that can arise with this method are reducing man's involvement to only producing a sample and not creating the child through intimacy.

Strategy:

IUI is usually recommended to couples with male infertility, such as diminished sperm mobility or a low sperm count. However, IUI may also be chosen as a fertility procedure for other reasons, like erectile dysfunction or unexplained infertility. Certain treatments, such as radiotherapy or chemotherapy also carry infertility as a risk, so men have the option of freezing their sperm prior to treatment for future use.

The procedure can be broken down into 3 main steps:

- Tracking a woman's ovulation to establish a fertile period
- A semen sample is obtained and washed
- The sperm is directly inserted into the uterus

IUI normally takes place very shortly after ovulation, as it provides the best results. During the menstrual cycle, women are most fertile when the ovaries have only just produced the eggs. The majority of women ovulate 2 weeks after the first day of their cycle (approximately day 14). Women may be given an ovulation prediction kit (OPK) by their doctor. This device detects hormone levels in the saliva or urine to give an accurate prediction of their ovulation date.

The most important part of the IUI procedure however, is obtaining and preparing the semen sample and then inserting it directly into the uterus. There are numerous ways to accomplish this, such as:

- Masturbation
- A condom that collects the semen during sexual intercourse
- Surgical sperm retrieval, where a physician removes sperm directly from the epididymis
- Either electric or vibratory stimulation (if the man cannot ejaculate without any assistance)

Once the clinic has the sperm, they wash it. This process is very important as it removes any

components that could disrupt the fertilization and only retains the healthy and motile sperm, which have the best chance of reaching the egg. Once a fertile period is established and the sperm has been prepared, then insemination is ready to begin.

The actual procedure itself is very similar to a pap smear. During the procedure, a speculum is used to gently expand and keep the vagina walls open. The fertility doctor then uses a fine catheter to inject the washed sperm directly into the uterus. The catheter is inserted through the cervix and sperm is pushed by the doctor through the catheter.

Success rates may reach up to 20% for each cycle, if the couple has IUI every month, but the procedure is also dependent on several factors, like age, reason for infertility, among other variables.

Issues:

Pros Cons

Less Invasive (moral) Man's involvement reduced & Child not made from intimacy (moral)

Less Expensive (economical) Less Successful

IVF requires matured eggs to be removed from a woman's fallopian tubes and then implanting the embryo back into her uterus. This process is invasive and sometimes painful. In comparison, IUI is noticeably less invasive and is generally the first procedure that doctors suggest to women. Unlike IVF, no needles are involved, rather, doctors use a thin catheter to inject the sperm (or donor sperm) into a woman's uterus. IUI does not conduct any surgery for gaining pregnancy, because the eggs are not extracted from the body of the mother. This process is quick and only takes a few minutes.

Additionally, this procedure is remarkably more affordable for anyone facing infertility issues. You will not need to think twice about undergoing this treatment, as IUI is a low-cost option that only costs around \$2000 per cycle. IVF's hefty price tag starts around \$12,000, making it unattainable for some couples. So you are able to get a few IUI treatment cycles for the same price as 1 IVF treatment cycle.

Even though IUI is a great option for most couples, there are some social issues that can arise with the process. A man's sexuality is violated, as his involvement is reduced to 'producing a sample', which is usually by masturbation. The fertility doctors then use his sperm sample to impregnate his wife or in some cases, another woman. Similarly, the children that are conceived in this way are possibly treated as objects or 'projects to be realized', rather than a gift originated from intimacy between the two parents.

IUI is also less successful than IVF. For example, a 30-year-old woman that undergoes IVF has a 45% chance of a live birth in their first cycle, while IUI only has a 10-20% success rate for one cycle. Natural conception is more successful than IUI for healthy women under the age of 35. However, it is still a good option for couples with fertility issues.

Conclusion

This fertility procedure is highly recommended to Ben and Sarah, as it assists Ben's insufficiently motile sperm in reaching the egg. The couple are not only given the chance of conceiving, but Sarah will be more than comfortable during the process. This is because IUI does not require extraction of the eggs through surgery. The extensively affordable price of intrauterine insemination was also of great appeal to the couple. While the effectiveness may not be as high as other fertility procedures.....

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