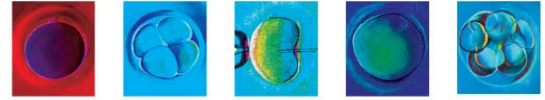


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FERTILITY FACT SHEET

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ENDOMETRIAL SCRATCHING

The success of an IVF cycle is determined by a number of factors including age, stimulation protocol response, embryo quality, embryo transfer technique, and uterine conditions. The final step of implantation of an embryo into the endometrium is the rate limiting step for the successful achievement of a pregnancy.

There are situations when good quality embryos are transferred into the uterus, but pregnancy does not occur. Research has shown that gentle endometrial scratching may improve implantation and pregnancy rates in women who do not conceive in an IVF cycle despite good embryo quality.

HOW CAN ENDOMETRIAL SCRATCHING HELP?

Uterine implantation is a complex process that requires attachment and invasion of an embryo into the endometrium. When this process fails, it is most commonly due to poor embryo quality or abnormal embryo genetics. However, there are situations when a good quality embryo may not attach to the uterus due to poor uterine receptivity.

In 2003, a study was published introducing the concept that controlled endometrial injury could improve conception rates in women undergoing IVF. The study showed that taking a sampling of the uterine lining using a biopsy catheter during the menstrual cycle preceding an IVF cycle substantially increased pregnancy rates over the control group. The authors hypothesized that injury of the endometrium could lead to the release of factors that may help the process of implantation. In 2009, another study demonstrated that endometrial injury resulted in increased expression of genes thought to play a role in preparing the uterus for implantation.

Employing this early research to help guide clinical recommendations for patients, many IVF centers are now utilizing endometrial scratching as a more common tool for patients with repeated implantation failure despite the transfer of good quality embryos.

HOW IS ENDOMETRIAL SCRATCHING DONE?

The procedure is performed in the office in the month preceding your embryo transfer. The appointment lasts approximately 15-20 minutes. After inserting a speculum in the vagina, a flexible, sterile plastic instrument called a Pipelle is introduced through the cervix into the uterus. A thin wire in the center of the Pipelle is pulled out which creates suction. The Pipelle is then rotated within the uterus a few times to draw some cells from the lining and create local "injury" to the endometrium. The procedure can cause uterine cramping and discomfort, therefore it is recommended that an over the counter pain medication such as Aleve or Ibuprofen be taken 1-2 hours before the procedure. It is not uncommon to have mild cramping or spotting following the procedure for 1-2 days. The endometrial biopsy can also be performed under anesthesia during a hysteroscopy evaluation of the uterus if this is recommended by your physician.