Patient Information - Endometrial Scratch
Why haven’t we fallen pregnant with IVF?

The chance of IVF being successful and resulting in a live birth depends on a number of factors including the woman’s age, the cause of subfertility and the length of time a couple have been trying to conceive. However, even in the most favourable groups according to these parameters, the chance of pregnancy is around 30-40% in the first cycle of trying. This means that even when top grade embryos are replaced in the womb, in more than half of cycles there is unexplained failure of implantation.

The chance of pregnancy depends on two main factors: embryo quality and endometrial receptivity. Factors affecting embryo quality have been difficult to define but it is recognised that women with low ovarian reserve, including older women (over 40 years of age) and women with a high FSH (FSH >10 IU/L) or low anti-mullerian hormone (AMH), tend to have lower grade embryos at IVF treatment.

Recurrent implantation failure (RIF) at IVF has been defined as failure to conceive after two to three cycles of IVF treatment where a number of good quality embryos have been transferred in a woman under 40 years of age with normal ovarian reserve. This is a very distressing condition for couples undergoing IVF treatment, made all the more frustrating by the lack of evidence about the reason for failure to conceive.

Is there anything that can be done to improve our chance of getting pregnant?

Some studies have suggested that causing a slight injury to the lining of the womb (endometrial scratch) changes the immune system inside the womb by stimulating natural killer cells which are thought to be a key part of embryo implantation.

The studies relating to endometrial scratching relate specifically to couples with recurrent implantation failure as defined above. For those couples having their third or fourth cycle of IVF treatment, their chance of pregnancy is now reduced to between a half and a third of the chance in their first cycle. For example, a 30 year old woman with tubal infertility has an approximately 40% chance of conceiving in her first IVF cycle but after three unsuccessful cycles, her chance of conception in a fourth cycle is now 13-20%. The studies suggest that doing an endometrial scratch in the cycle before IVF will improve the chance of pregnancy back to the chance in a first cycle.

- Only 30%-40% of people in the most promising category will get pregnant with IVF after a first attempt.
- Failure after three attempts with the transfer of good quality embryos in a woman under forty years old, is regarded as recurrent implantation failure (RIF).
The chance of getting pregnant reduces to 13%-20% after three unsuccessful attempts at IVF.

Special cells, part of the immune system, called ‘natural killer cells’, are thought to be important for embryos to implant in the womb.

Causing a slight injury (endometrial scratch) to the lining of the womb may stimulate these cells.

‘Scratching’ the womb lining in your natural cycle before the fourth or more unsuccessful IVF attempts, may improve the chances of pregnancy back to 30%-40%.

If endometrial scratching is so good, why haven’t we been offered it before?

The evidence about the benefits of endometrial scratching is not completely clear. Only two of the studies have used the best study design of randomly selecting patients for endometrial scratch and one of those studies did not show an increase in live birth rates compared to the women who did not have the scratch. There are studies which do not show an increase in pregnancy rates in frozen embryo transfer treatment or treatment with donated eggs.

There are no studies to guide us if a woman has had previous miscarriages. The studies have only looked at recurrent implantation failure, so there is no evidence about its use after just one failed cycle. It may be that in time, evidence becomes available to guide us as to when to offer the procedure and whether it is truly effective at improving the chance of getting pregnant.

The evidence for the benefits of endometrial scratch is inconclusive.

Currently, the effects of endometrial scratch has only been studied following recurrent implantation failure.

There are no studies of its effects after only one unsuccessful IVF attempt.

There are no studies of its effects after miscarriages.

How is an endometrial scratch done?

The procedure involves inserting a speculum (smear test instrument) to visualise the neck of the womb (cervix). The cervix is cleaned with sterile water and cotton wool. A fine straw, approximately as thick as the ink tube inside a BIC biro, is inserted through the cervix into the cavity of the womb. The plunger is withdrawn to create suction and the straw is moved around the cavity of the womb.

The scratch is scheduled for the week before your period in the cycle before IVF, although it is thought that the effects can last for two to three cycles.
• The scratch is expected to be done the week before your period in your natural cycle, before the IVF attempt.
• The neck of your womb is located, as in a smear test.
• A fine straw is then inserted into your womb and held onto the lining by a little suction, following which it is moved around.
• The effects may last for two to three cycles.

It is very important not to have a scratch procedure if you are pregnant as this could cause the pregnancy to miscarry. The scratch is done after mid-cycle when you may have released an egg but before a period comes; so theoretically you could have conceived in that cycle. To prevent the risk of the procedure affecting a naturally conceived pregnancy, you must agree to avoid any chance of pregnancy in that cycle, either by using contraception (condoms) or by avoiding intercourse.

• Endometrial scratch can cause you to miscarry if you are pregnant.
• You must not be pregnant when you have an endometrial scratch.
• You must agree to avoid a naturally occurring pregnancy.
• There is a small risk of infection.
• If you have not previously been screened via a swab test, you will be offered Azithromycin.
• Let the doctor know if you are allergic to Azithromycin.

Are there any risks with the endometrial scratch procedure?

There is usually some period-like pain or discomfort during the procedure but this usually wears off very quickly.

There is a small risk of introducing infection but you should have had swabs taken earlier in the treatment pathway to screen you for infections. If you have not previously had swabs taken you will be offered Azithromycin to take before the procedure to reduce the risk of infection. It’s very important to tell the doctor if you are allergic to Azithromycin.

Will I have to pay for an endometrial scratch?

Yes, this procedure is not offered on the NHS because, as explained above, there is currently no evidence to support its use before the first cycle of IVF. Since the NHS only funds one cycle of IVF in certain specified situations, and since it is only indicated for recurrent implantation failure, by definition you will be having self-funded treatment by the time a scratch is discussed with you. A price list is available on request.
How do I organise an endometrial scratch?

You can ask the Doctor you see at your debrief appointment to arrange this, or you can ask the Specialist Nurses to arrange it when you have your planning meeting.

- The NHS funds a very limited number of IVF cycles.
- You will have exhausted your NHS-funded IVF attempts by the time it is appropriate to offer you endometrial scratch, as explained above.
- Therefore, endometrial scratch is not funded by the NHS.
- You will have to pay for the scratch.
Together we can achieve so much