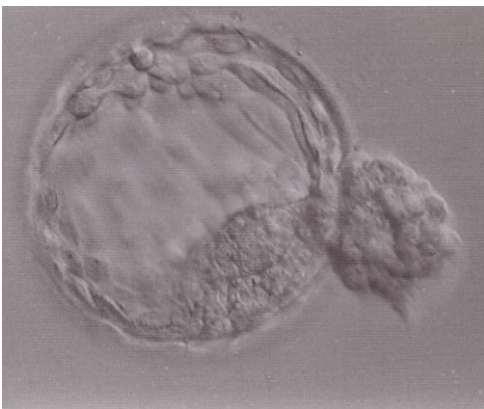


What is hatching?

Hatching occurs naturally when embryos are in a woman's uterus. It takes place five or six days after an embryo transfer, when the developing embryo 'escapes' from the zona pellucida (the embryo 'shell'). Once the embryo has successfully hatched, it can make contact with the lining of the uterus, known as the endometrium. Some embryos will then implant and continue to develop into a pregnancy. If an embryo cannot hatch, then it is impossible for it to implant and for pregnancy to occur.



A blastocyst hatching from the zona pellucida 'shell'

What is assisted hatching?

Assisted hatching is a laboratory technique to enable embryos to hatch successfully. A small hole is made in the zona pellucida by exposing the embryo to a drop of acid tyroses, enabling the embryo to 'hatch out' through the affected area.



A small hole is made in the zona pellucida to assist hatching

The procedure is carried out just before the embryos are transferred to the woman's uterus.

Can assisted hatching help everyone having IVF?

Assisted hatching has been used in clinic world wide for several years and many babies have been born after its application. However, no conclusive laboratory-controlled test results are currently available to support generalised assisted hatching for all patients and so the National Institute of Clinical Excellence (NICE) does not recommend it as a standard procedure. But limited evidence suggests that it may improve the chance of pregnancy for the following women:

- with three or more failed embryo transfers, OR
- aged over the age of 38, OR
- with a high baseline FSH level

MFS carefully assesses the possible benefits of assisted hatching for each patient before considering the process as part of any treatment plan.

Are any other drugs required?

Clinics with the most successful assisted hatching programmes prescribe a short course of and steroids to be taken starting on the day of egg collection (or embryo thaw). The side effects of these steroids and antibiotics are minimal but patients taking steroids must inform MFS if they are taking any other medicines and they must avoid contact with people who have chicken pox or measles. Steroids are contra-indicated in many serious medical conditions and a doctor will discuss the patient's medical history in full before they may be prescribed.

What are the risks?

Only the embryos that are to be replaced will undergo assisted hatching. There is a very small risk that embryos might be damaged by the procedure in which case another embryo may be selected. The rate of damage to the embryo should be less than 1%. Several follow-up studies on children born following assisted hatching have been carried out worldwide and show no increase in the risk of abnormalities. Any long term risks are unknown.