

In-Cycle

# Laser-Assisted Hatching

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## What You Need to Know



CITY FERTILITY CENTRE

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## Laser-Assisted Hatching

You're probably aware of the use of lasers in health-related fields, such as eye surgery, so you may not be surprised to learn that lasers are also a valuable, safe and gentle tool in fertility treatment.

This fact sheet explains how lasers, which are simply strong beams of light, can be used to help your embryo break out of its shell and attach to the lining of your uterus. It also covers who the technique is most suited to and the benefits it offers. It will give you a better understanding of why we adopt the procedure as another way of maximising your chances of falling pregnant. If you still have questions, please don't hesitate to consult your treating specialist or embryologist.

### What is Laser-Assisted Hatching and how can it Help?

Laser-assisted hatching is a scientific IVF technique that can make it easier for the embryo to "hatch" or break through its outer layer or "shell" (a membrane also known as the zona pellucida) by creating an opening. In some situations this layer is abnormally thick and/or hardened, with the freezing and thawing process among the contributing factors. The less difficulty the embryo has in hatching, the better its chance of attaching or implanting into the wall of the uterus.

Pregnancy cannot occur unless the embryo hatches and implants, and laser-assisted hatching can play a key role in achieving these crucial steps.

### What is Involved?

The procedure involves an embryologist sending a brief, strong light beam, under a microscope, to create a gap in the shell through which the embryo can come out. This is usually done three days after fertilisation has occurred during an IVF or Intracytoplasmic Sperm Injection (ICSI) cycle, which is when the embryo has begun to cleave (divide). It takes only a few seconds and does not harm the embryo. The embryo is then transferred back into the patient's uterus to attach itself to the lining and continue growing.

## Who is Laser-Assisted Hatching Recommended for?

Any patient can take advantage of laser-assisted hatching, but those most likely to be best suited are those who:

- Are above the age of 37
- Produce a high level of Follicle Stimulating Hormone (FSH) early in their cycle
- Have had unsuccessful IVF cycles
- Have a tendency to produce a harder and/or thicker zona pellucida

## What are the Advantages of the Technique?

A laser has been shown to be superior to other forms of assisted hatching (chemical and manual) thanks to several advantages:

- Minimal handling of the embryo
- Fast and exact control over drilling of the shell opening
- It is gentle and safe, with no negative effects on the embryo
- Wide availability to patients, and offered under clinical guidance depending on your particular circumstances

## Factors to Consider

Please keep in mind that the potential fertility improvement laser-assisted hatching may yield depends on a woman's age and diagnosis, as well as her partner's initial semen analysis, and should be discussed with your specialist. Patients' individual needs are paramount as we devise the best way forward in your treatment.

## Be Guided by our Expert Staff

We hope this brochure has been a valuable source of information about one example of how City Fertility uses the latest technology to give you the best chance of achieving a pregnancy. However, your specialist and embryologist will be only too happy to discuss laser-assisted hatching, and its relevance to your circumstances, while formulating your treatment plan.

You can be assured that any recommendation will be based on your specific situation as we strive to help you fulfil your dream of taking home a baby.

## Where to Now?

If you would like more information on laser-assisted hatching, please speak with your treating specialist or embryologist.

## Contact Us

Adelaide	1300 483 235
Brisbane City	1800 123 483
Brisbane Southside	1300 483 784
Gold Coast	1300 859 116
Melbourne City	1300 781 483
Melbourne Bundoora	1300 483 232
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