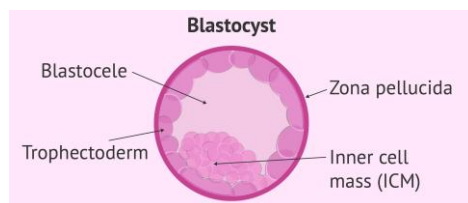




hCG Infusion: Stimulates Implantation

WHAT IS hCG?

Human Chorionic Gonadotropin or hCG is the pregnancy hormone that is naturally produced by the embryo from as early as Day 3 of development. The function of hCG is to prepare the lining of the uterus for implantation of the embryo by triggering a cascade of growth factors and stimuli. This is what we call cross-talk between mother and baby. By the blastocyst stage of development (Day 5), the trophoblast cells are the primary site of hCG production and these cells become part of the placenta that continues to support pregnancy for the next several months.



WHAT IS INVOLVED?

Because IVF embryos are grown outside of the body in an incubator, there is little opportunity for communication between the embryo and mother. The idea of introducing the hCG hormone into the uterus to mimic the natural cross-talk process, has therefore been around for many years. Now the combined results from at least 17 trials in a Meta-analysis¹, has provided an indication that there maybe a benefit for some women to undergo this procedure. Uterine infusion is like having a mock embryo transfer (ET), just 5-15 minutes beforehand. A very small volume (0.04ml) of hCG is inserted by your Repromed doctor using an infusion catheter. During the interval between the infusion and ET, the speculum is removed and you are able to relax. At around 8 minutes the speculum is reintroduced and the ET will be completed.

WHO IS IT SUITABLE FOR?

The best available information from a systematic review has shown there is medium quality evidence that uterine infusion may increase the clinical pregnancy and Live Birth rate for women undergoing cleavage stage transfer (ie Day 2 or 3)¹. It suggests that at a clinic with a live birth rate of 27% per cycle for early cleavage stage embryos, use of hCG infusion would be associated with a live birth rate ranging from 36% to 51%. Another major review of the literature has established the most effective concentration and timing of the procedure².

Some studies have suggested that there are other groups of women that may benefit from this procedure, but the evidence is very low. Our recommendation at Repromed, is to primarily offer hCG infusion to women:

- undergoing a cleavage stage (Day 2 or 3) transfer
- with a history of multiple failures of implantation or IVF attempts (either cleavage stage or blastocyst stage).
- with Grade 3-4 endometriosis

IS IT SAFE?

The available evidence so far, does not raise any concerns with regards to negative outcomes such as fetal abnormalities, miscarriage or ectopic rates, however with increasing widespread use, it is likely that more evidence will be available.

A procedural risk does exist during rare occasions when the infusion catheter is difficult to introduce through the cervix, thus creating complications for the embryo transfer. For this reason we do not recommend uterine infusion for women who have a history of difficult embryo transfers or cervical abnormalities.

HOW MUCH DOES IT COST?

HCG infusion is an extra cost (an Add-on) to IVF cycles, so please check the price list on our website.

WHAT ARE ADD-ON'S?

Repromed offers a range of additional techniques that are optional extras (Add on's) to the core treatment cycle. Our team continuously assess the scientific merits, safety, value and clinical evidence of the latest medical advances, to ensure clients

have access to a comprehensive range of options. It is our policy to recommend Add-on's only where a considered benefit to improved chances of pregnancy exist, based on each client's reproductive history and diagnosis.

Add-on's have extra costs associated with them and this can be found on the Repromed website under cost of IVF infertility treatment.

References

- Craciunas L, Tsampras N, Raine-Fenning N, Coomarasamy A. Intrauterine administration of human chorionic gonadotropin (hCG) for subfertile women undergoing assisted reproduction. Cochrane Database of Systematic Reviews 2018, Issue 10. Art. No.: CD011537. DOI:10.1002/14651858.CD011537.pub3..
- OSimopoulou M et al Review: Investigating the Optimal Time for Intrauterine Human Chorionic Gonadotropin Infusion in Order to Improve IVF Outcome: A Systematic Review and Meta-Analysis In Vivo November-December 2019 33 (6) 1737-1749;