
PRESS RELEASE

New drug provides safer alternative to conventional IVF treatment

The hormone kisspeptin could be a safer and more effective way for harvesting eggs during IVF treatment, according to a new study presented today at the [Society for Endocrinology annual conference](#) in Edinburgh.

During conventional IVF treatment, doctors inject patients with the hormone human chorionic gonadotropin (hCG), which helps ovaries mature eggs that are later harvested to mix with sperm to make an embryo. A potential side effect during this step of IVF is ovarian hyper-stimulation syndrome (OHSS) - a potentially life-threatening condition.

Severe OHSS occurs in up to 2% of all patients, but women with polycystic ovarian syndrome (PCOS) are at much higher risk, with up to a quarter of such patients suffering severe OHSS.

In this study, researchers from Imperial College London, working with clinicians from Imperial College Healthcare NHS Trust, researchers from Imperial College London found that using kisspeptin as an alternative hormone to hCG - to mature and harvest eggs did not lead to OHSS, even in women at high risk of developing the condition.

Sixty women at high risk of OHSS were given kisspeptin at different doses. 36 hours later, their eggs were harvested, fertilised and one or two resulting embryos were implanted.

No women developed moderate, severe or critical OHSS during their pregnancy. The average live birth rate was 45% across all doses, rising to 62% for women given the best performing dose of kisspeptin. However, larger clinical studies are needed to confirm whether using kisspeptin results in higher live birth rates than hCG.

"IVF is an effective therapy for couples affected by infertility, but it can result in OHSS, which is a potentially life-threatening side effect", said lead author of the study Ali Abbara. "We have shown that using kisspeptin in place of conventional drugs used during IVF treatment safely matures eggs, even in women at high risk of OHSS".

"Interestingly, our results also suggest that using the best performing dose of kisspeptin resulted in pregnancy rates almost twice those reported for this age group using conventional stimuli of egg maturation. Kisspeptin appears to be a promising therapy and further studies are now needed to directly compare kisspeptin with currently available IVF treatments".

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Notes for editors

1. Imperial College London have developed a short video describing the impact of the research. The video is available on YouTube and will go live on Wednesday morning:
<https://www.youtube.com/watch?v=FnHNQnX9AuU>
2. The study *Kisspeptin-54 safely and effectively triggers oocyte maturation during IVF treatment in women at high risk of developing ovarian hyperstimulation syndrome (OHSS)* will be presented by Ali Abbara at the Society for Endocrinology's annual conference at 12.15 GMT, room OC6.2 on Wednesday 4 November 2015.
3. For press enquiries, please contact the Society for Endocrinology press office:

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4. The Society for Endocrinology's annual conference is held at the Edinburgh International Conference Centre from 2-4 November 2015. The conference features some of the world's leading basic and clinical endocrinologists who present their work. Journalists wishing to attend should contact the Society for Endocrinology press office using the details above. The scientific programme is available on the [conference webpage](#).
5. The Society for Endocrinology is a UK-based membership organisation representing a global community of scientists, clinicians and nurses who work with hormones. Together we aim to improve public health by advancing endocrine education and research, and engaging wider audiences with the science of hormones.
www.endocrinology.org
6. Imperial College Academic Health Science Centre (AHSC) is a partnership between Imperial College London and Imperial College Healthcare NHS Trust, based in West London.