

What is Ovarian hyperstimulation syndrome 'OHSS'?

OHSS can be a complication of ovarian follicle stimulation following fertility treatment. It most commonly occurs following an IVF stimulation cycle where FSH injections are given, but occasionally can occur after ovulation induction or intra-uterine insemination when Clomiphene Citrate is used. The word 'syndrome' is used as there are many different symptoms and signs, and not all of them are necessarily present. Symptoms range from mild in most cases, to moderate and severe in rare cases.

Many women who undergo IVF will develop mild symptoms. Severe OHSS is rare, but serious, as it may be life threatening, necessitating hospitalisation and intense monitoring. With severe OHSS, fluid shifts from the blood circulation to other areas in the body such as the abdomen and lungs. The cause is unknown but occurs when ovaries are stimulated, and then are exposed to hCG (human Chorionic Gonadotrophin).

hCG exposure can occur through either an hCG trigger injection or from hCG production from a resultant pregnancy.

Women who are at an increased risk for OHSS are those with:

- ✓ Having polycystic ovary syndrome 'PCOS'
- ✓ Having had OHSS previously
- ✓ Having an AMH >24pmol/L
- ✓ Being younger in age
- ✓ Having a high Oestradiol (E2) level during treatment
- ✓ Having more than 17 follicles on ultrasound scan prior to egg collection
- ✓ Having 15 or more eggs collected during the IVF cycle

What can be done if you are felt to be at an increased risk for OHSS during my cycle?

- Cycle cancellation: If the risk is detected early in the cycle, by high oestradiol level or by a large number of follicles on scan, the cycle may be stopped, and then restarted with your next cycle with a lower dose of stimulation drugs.
- Agonist trigger: If a large number of follicles are seen on your final scan or you have a high oestradiol on a blood test prior to your trigger injection, you will be advised to have an 'agonist trigger' rather than an 'hCG trigger'. In this situation, freezing of all suitable embryos is required.
- Freeze all cycle: If more than 15 eggs are collected after an hCG trigger, the cycle will be changed to a freeze all cycle, and no fresh embryo transfer will occur. This is to reduce the risk of OHSS occurring and / or being exacerbated by hCG produced by a resultant pregnancy. A frozen embryo can be subsequently transferred once the risk of OHSS is gone. Performing a frozen rather than fresh transfer will not affect your overall chance to have a baby.
- Sometimes a medication called Cabergoline may be prescribed following your egg collection, to reduce your risk of you developing OHSS, if Cabergoline is prescribed it is not appropriate to transfer a fresh embryo.

What Should I Look For?

The most common time to develop OHSS is in the week following egg collection. If you become pregnant, OHSS could be made temporarily worse by hCG produced by pregnancy.

Please contact a nurse or doctor if you experience symptoms such as the following:

Mild OHSS	Abdominal distension / bloating and discomfort <ul style="list-style-type: none">- nausea and / or vomiting- diarrhoea
Moderate OHSS	The symptoms above PLUS <ul style="list-style-type: none">- flu' like symptoms / shortness of breath- increase in weight of 1 kg per day- reduced urine output / dark concentrated urine- swelling in the abdomen, upper thighs, and pubic region
Severe OHSS	The symptoms above PLUS <ul style="list-style-type: none">- severe difficulty breathing- extreme dehydration- risk of venous thrombosis

If you develop any symptoms, please ring Fertility Plus as soon as possible. Blood tests and an ultrasound scan may be required to check for fluid accumulation in the abdomen and to assess the size of the ovaries.

What happens if I develop symptoms of OHSS?

Mild OHSS usually disappears within one to two weeks and requires only outpatient monitoring. If you develop moderate or severe OHSS then you may require hospital admission for formal assessment and treatment to correct dehydration, assess kidney function and possibly drain fluid from the abdominal cavity or from around the lungs.

It is important that you understand this information and keep in contact with Fertility Plus if you have any symptoms that could suggest that you may be developing OHSS.

If you have urgent concerns outside clinic hours, please ring Women's Assessment Unit at Auckland City Hospital on 09 631 0784 for advice. This service is available 24 hours a day.