

Information for Patients

Ovarian Hyperstimulation Syndrome

What is Ovarian Hyperstimulation Syndrome?

Ovarian hyperstimulation syndrome (OHSS) is a complication of fertility treatment, particularly of In vitro fertilisation (IVF). It can be potentially serious and it is important that you are aware of it if you are having any fertility treatment. Approximately a third of patients will have mild symptoms, with only 2-8% of patients needing medical intervention.

OHSS develops if, during your treatment whilst you are having injections, your ovaries develop too many follicles (the sac which contains the egg) as they over-respond to the medication. If this happens, fluid from the blood vessels may leak into your abdomen and in some cases into the space around the heart and lungs. The kidneys and liver may also be affected, but this is usually mild and will settle without medical intervention.

Most cases of OHSS occur in women undergoing fertility treatment, but this condition can develop in women receiving any fertility treatment where the ovaries are stimulated with injections or in treatment where tablets are given to stimulate ovaries, such as clomid.

When would I develop OHSS?

OHSS only develops after the trigger injection (the final injection you will be instructed to take before egg collection) in IVF treatment, or after ovulation in other types of fertility treatment.

It is normal to have some mild discomfort after egg collection for IVF. If you are worried or develop any of the symptoms below, you should inform your clinic and seek their advice.

What are the symptoms?

OHSS can range from mild to severe cases:

- **Mild** OHSS – mild abdominal swelling, discomfort and nausea.
- **Moderate** OHSS – symptoms of mild OHSS, but the swelling is worse because of fluid build-up in the abdomen. This can cause abdominal pain and vomiting.

- **Severe** OHSS – symptoms of moderate OHSS with extreme thirst and dehydration. You may only pass small amounts of urine. You may experience difficulty breathing because of fluid in your chest. A serious, but rare, complication is formation of a blood clot (thrombosis) in the legs or lungs. The symptoms of this are a swollen, tender leg or pain in your chest and breathlessness.

You should report any such symptoms immediately to your doctor or go to the Emergency Department of your local hospital.

Who can get OHSS?

Some women are at a higher risk than others of developing OHSS. These include women who suffer from polycystic ovary syndrome (multiple cysts on their ovaries), who are under 30 years of age and those who have previously had OHSS. If you have had 20 or more eggs collected and/or very high oestradiol (a hormone measured during your treatment) levels during IVF, your chance of developing OHSS is increased. Women are at a higher risk of OHSS if they become pregnant from the treatment, particularly if there is a multiple pregnancy (more than one baby).

Though these risk factors can alert us for OHSS, it can also affect women with no risk factors at all. Hence, it is crucial that all women undergoing fertility treatment are aware of the symptoms of OHSS.

How long does OHSS last?

If pregnancy does not result from the treatment, the symptoms of OHSS resolve in 7-10 days. If a pregnancy does result, OHSS tends to get worse and last longer - up to a few weeks.

When should you seek medical advice?

If you are having fertility treatment and you experience symptoms of OHSS, please ring the Department on (0161) 276 6000 (or the Emergency Department out of hours) or inform the clinic at which your treatment took place. Even if you have a mild case of OHSS, they will want to observe you for sudden weight gain or worsening symptoms.

You should seek medical advice right away if you develop breathing problems or pain in your legs during your fertility treatment. **This may indicate an urgent situation that needs prompt medical attention.** If you are unable to contact your clinic, contact your doctor or the Emergency Department of your local hospital.

If you experience persistent vomiting, abdominal pain or increasing bloating, please seek medical advice.

What should I do if I have OHSS?

- Seek medical advice as above.
- Maintain your normal oral intake of fluids and food. There is no need to drink excessive amounts of fluid, and it is best to drink according to how thirsty you are.
- If you have pain, take paracetamol or codeine in line with the manufacturer's dosage instructions. These medications are safe to take in pregnancy. You should avoid anti-inflammatory drugs (aspirin or aspirin-like drugs such as ibuprofen), as these can affect your kidneys.
- It is advisable to remain active to reduce the risk of thrombosis (a clot).
- Watch the amount of urine you produce. Please ring the Department on (0161) 276 6000 or attend your local Emergency Department if you have not produced more than 1 litre of urine in 24 hours.
- You should avoid having sex or doing strenuous exercise to avoid injury to your ovaries.

Will I need to be admitted to hospital?

Many women can be managed as outpatients (without a hospital stay), particularly if they have mild OHSS. However, you may need to be admitted to hospital if you suffer from severe nausea, pain which is not helped by pain-relieving medications or if your condition is not improving. Sometimes, hospital admission may be needed if you are unable to attend hospital easily for monitoring and follow-up.

If you are admitted to a hospital which is not the one where you had your fertility treatment, you should inform the clinic where you had your treatment. This allows them to liaise with the doctors looking after you and to report your admission to the HFEA (the body that regulates fertility treatment in the UK).

What may happen at the hospital?

You will be asked to describe your symptoms and your abdomen will be examined. The doctor may arrange blood tests for your kidney and liver function and to measure how concentrated your blood is. You may have an ultrasound scan to measure your ovaries and to check whether there is any fluid build-up in your abdomen. A diagnosis is made on the basis of your symptoms, the examination findings and the results of your tests. If you are well enough to go home, you may be advised to attend for regular check-ups.

What is the treatment for OHSS?

Although there is no treatment that can reverse OHSS, it will usually get better with time. Treatment is to help symptoms and prevent complications. This includes:

- Pain relief such as paracetamol or codeine
- Anti-sickness drugs to help reduce nausea and vomiting.
- An intravenous drip to replace fluids – this may be needed if you are very dehydrated or if you are unable to eat and drink due to nausea.
- Support stockings and blood-thinning injections to prevent thrombosis (a blood clot in the leg or lungs). Injections for blood thinning should be continued until your period starts (if you are not pregnant) or until at least the end of the 12th week of your pregnancy. If you conceive, you may be referred to a special clinic for this treatment to be monitored and the length of treatment to be decided.
- If your abdomen is tense and swollen because of fluid build-up, you may be offered a procedure known as a paracentesis. This is when a thin needle or tube is inserted under ultrasound guidance into your abdomen to remove fluid.

Can OHSS affect my pregnancy?

- There is no evidence that OHSS causes miscarriage or any abnormalities in the baby.
- You may be at increased risk of developing pre-eclampsia or giving birth to your baby prematurely.

