Ovarian Hyperstimulation Syndrome (OHSS)

Department of Gynaecology
What is OHSS?

Ovarian Hyperstimulation is a complication of fertility treatment, particularly that of in vitro fertilisation (IVF).

What are the different grades of OHSS?

Depending on severity of your symptoms, OHSS is graded as: mild, moderate or severe.

What are the symptoms of OHSS?

**Mild OHSS** – mild abdominal swelling/bloating, abdominal discomfort and feeling sick.

**Moderate OHSS** – The same symptoms as mild but worsening of abdominal discomfort, swelling/bloating due to a build up of fluid in the abdomen, minor weight gain, pain, nausea and loose stools may be present.

**Severe OHSS** – The same symptoms as moderate plus: weight gain, increase abdominal girth measurements, extreme thirst, dehydration, passing little amounts of urine, difficulty in breathing, redness and tenderness in legs or chest pain.

What causes OHSS?

When having fertility treatment the drugs used to stimulate the ovaries produce many follicles (follicles are small sacs of fluid where the eggs develop). Sometimes there is an excessive response to these drugs causing OHSS.

Overstimulated ovaries become bigger and they release chemicals into your bloodstream that make blood vessels leak fluid around your
body. This fluid concentrates into your abdomen. In severe cases this fluid can disperse into the space around your lungs, and very rarely your heart. This can cause pressure making it difficult to breathe which will require immediate hospital admission.

**Who gets OHSS?**

All women undergoing ovarian stimulation during fertility treatment are at risk of developing OHSS. Mild OHSS can occur in 33% of women having treatment: moderate / severe OHSS is 1/100 women (1%).

**Who is at risk of developing OHSS?**

*Women are deemed more at risk of developing OHSS if:*
- they are known to have polycystic ovaries
- age <30 years
- have suffered OHSS previously
- successful IVF pregnancies – particularly those of a multiple pregnancy.

**How to resolve OHSS?**

There is no specific tests to diagnose OHSS but is based on the severity of symptoms experienced, the size of your ovaries, and if there is presence of fluid in your abdomen. An ultrasound scan will be carried out to measure these.

OHSS can therefore be managed as an outpatient meaning you will be allowed to go home with follow up appointments (the doctor you see will decide when these will be arranged) or you will be admitted as inpatient (requiring you to stay in hospital).
Outpatient management (mild – moderate OHSS)

- Take pain killers regularly such as paracetamol and/or codeine. No Non Steroidal Anti Inflammatory Drugs (Ibuprofen/Nurofen) should be prescribed or administered.
- Drink fluids to aid thirst not to excess.
- Monitor how often you are passing urine.
- Strenuous exercise and sexual activity should be avoided until symptoms are resolved.
- Continue progesterone support provided by the IVF clinic.
- Continuous monitoring and assessment of symptoms should be between every 2-3 days by a clinician.

Inpatient management (moderate - severe OHSS)

- Take pain killers regularly such as paracetamol and/or codeine. No Non Steroidal Anti Inflammatory Drugs (NSAIDs) should be prescribed or administered.
- Anti sickness medications will be prescribed and administered if required.
- Intravenous drip for hydration.
- Monitoring a strict urine output. This could result in being catheterised (a small tube inserted into the bladder draining urine).
- Support stockings and anti coagulation injections administered to prevent blood clots in the veins and lungs (thrombosis) developing.
- Regular monitoring of vital signs (blood pressure, heart rate, breathing), weight, abdominal girth and blood tests.
- A chest x-ray or ultrasound scan may be organised.
- A low sodium diet should be maintained.
- A procedure called paracentesis (a thin needle/tube is inserted into your abdomen) might be offered to release the build up of fluid.
Every person who has symptoms of OHSS suffers differently so the above is a list of the most common management options. They might not all be applicable to you, your doctor will discuss the treatment with you, and your specific conditions.

**How long does OHSS last?**

There is no treatment to reverse OHSS and is symptom management and control only. Symptoms can take a few days to a few weeks to resolve depending on the severity and management plan undertaken.

**What are the risks of OHSS?**

There has been no evidence to show that suffering OHSS affects the baby.

Thrombosis is a potential risk of OHSS and screening for this will be done whilst seeing a doctor – with precautionary action taken if applicable. 0.7-10% is the range of reported incidences of patients suffering with OHSS developing thrombosis. To help decrease the risk of this happening to you please look at our BSUH leaflet ‘Preventing Deep Vein Thrombosis Whilst In Hospital’ for some useful advice whether you are staying in hospital or going home.

Ovarian torsion is a rare complication of OHSS affecting 0.2% of cases – this is where the Overstimulated ovary twists round itself cutting off its blood supply. The clinician will discuss this in more detail with you if necessary.
What about going home?

When the clinicians have made you medically fit to leave the hospital they will give you a copy of your discharge summary. This gets sent to your GP who needs to know of your hospital stay but you should inform your IVF clinic and have follow up appointment with them. We may organise for you to have a blood test and follow up on the gynaecology ward following discharge home.

Continue to manage your symptoms effectively, follow the outpatient management listed above and what works for you.

Who can I contact with any concerns or questions?

If you have any problems or are worried, please do not hesitate to contact us on the gynaecology ward:

**Royal Sussex County Hospital**
Level 11 Tel: 01273 523191

**Princess Royal Hospital**
Horsted Keynes Tel: 01444 441881 Ext. 5686
This information sheet has been produced by the Gynaecology Ward Sister Samantha Backley.

References/useful links

1. Royal College of Obstetricians and Gynaecologists. (February 2016). The management of ovarian Hyperstimulation syndrome. No.5 London: RCOG
