

Centre for Reproductive Medicine

Ovarian Hyperstimulation Syndrome (OHSS)

This fact sheet aims to draw attention to the “Ovarian Hyperstimulation Syndrome” (OHSS). OHSS is an uncommon but significant side effect of the drugs which are used to stimulate production of eggs in fertility treatments.

In the majority of patients who develop OHSS, it is a mild and self-limiting condition but it is important to recognise the signs to prevent it developing into a more serious condition.

Who can develop OHSS?

Anyone who is given drugs to stimulate ovulation or the production of eggs. Anyone who is known to have ***Poly Cystic Ovaries (PCO)*** are at greater risk.

What drugs can cause OHSS?

Any drug used in the stimulation of ovulation has the potential to cause OHSS – even fertility tablets such as Clomiphene or Clomid - although OHSS is very rare in these circumstances. The drugs most likely to lead to OHSS are those commonly used in In Vitro Fertilisation and related treatments, known collectively as Gonadotrophins. ***Examples of these drugs are Gonal F, Bemfol, Luveris, Menopur.***

How likely am I to develop OHSS?

People receiving Gonadotrophins such as those listed above for treatments such as In Vitro Fertilisation have up to a **15 % chance of developing mild OHSS**. ***Moderate and severe forms*** of OHSS which will require admission to hospital and specialised treatment occur in **0.1 – 2 %** of cases undergoing IVF and related treatments.

What are the symptoms of OHSS?

The most common symptoms are ***generalised abdominal discomfort and nausea***. Abdominal swelling can be due to mild or moderate OHSS. The abdominal swelling is due mainly to accumulation of fluid. In more serious cases, the abdominal

swelling becomes marked and the individual may complain of a **reduction in the amount of urine passed and of breathing difficulties**.

The **ovaries are usually quite enlarged with multiple cysts** (from which the eggs have been removed). These may be felt in the lower part of the abdomen and can give rise to discomfort and pain in the lower abdomen.

Is OHSS a dangerous condition?

OHSS is uncommon and when it occurs is usually a mild condition with slight abdominal distension and discomfort which passes off after a week or so without requiring admission to hospital or special treatment. In some cases, however, it develops into a more serious condition which requires hospitalisation and specialist treatment. Even in these more severe cases, the condition almost always resolves completely with no long-term complications or effects. Fatalities have occurred from OHSS but are exceptionally rare – putting this into context you are 10 times more likely to die from normal childbirth than from OHSS.

What treatment will be required if I develop OHSS?

Mild – This is the most common type. Admission to hospital is not necessary. The centre will monitor you more closely until the condition resolves. This may involve taking blood tests more frequently. Special treatment is not necessary.

Moderate – Admission may be required for a few days closer observation. Blood tests are taken daily and fluid replacement with a drip may be required. It is important to monitor your fluid intake and output.

Severe – In these rare cases, hospitalisation is always necessary. Treatment will involve a drip to replace fluid, salts (electrolytes) and protein. Fluid in the abdomen which causes distension may be drawn off by passing a small needle through the wall of the abdomen (local anaesthetic). Other specialist treatment may be necessary and intensive monitoring is carried out. This condition usually lasts 1 – 3 weeks.

If you are admitted to a hospital away from your fertility centre, we would strongly recommend that your gynaecologist contact your infertility specialist to discuss treatment. We would strongly advise against any attempt to operate on the ovaries in these circumstances without prior discussion with a specialist.

Are there any long term effects following OHSS?

A complete recovery is the rule even when the condition is severe. The ovaries, which become quite enlarged with cysts, can take several weeks to shrink down but return completely to normal within 4 – 6 weeks. There is no evidence to suggest that

this condition increases the likelihood of developing cancer of the ovaries in the future.

What about the treatment cycle?

If there are signs of this condition developing during the stimulation part of the infertility treatment, we will normally abandon the treatment or adjust the treatment to prevent it developing into a more serious problem. If the treatment is abandoned, further treatment will be discussed with you without delay and can usually be started within a few weeks.

Is it possible to prevent this problem?

As has already been mentioned, people with polycystic ovaries are more likely develop this problem. The ovaries are scanned at the start of treatment and if they are polycystic we would normally adjust the dose of stimulation to take this into account.

During the cycle of stimulation (for In vitro Fertilisation), one of the purposes of monitoring is to detect signs of over response and possible developing OHSS. If this is the case we may either reduce the dosage of the stimulation or abandon the treatment.

Anybody receiving Gonadotrophin drugs to stimulate the ovaries (whatever the treatment) should have monitoring specifically to detect signs of OHSS. The monitoring will be with ultrasound scans to assess the development of the follicles in the ovaries and possibly by blood test to measure the Oestradiol level in the blood. Excessively high levels of Oestradiol indicate a high risk of developing OHSS. Frequency of monitoring will be determined by the treatment you are receiving, the Centre's protocol and your response to the drugs.

What about pregnancy with OHSS?

When a pregnancy occurs in a person who has symptoms of OHSS, the condition is likely to be aggravated and be more prolonged. For this reason, a patient who is undergoing In Vitro Fertilisation and who is at significant risk of developing OHSS may be advised to have all embryos cryopreserved for future use rather than replace fresh embryos and run the risk of worsening the OHSS. If a person does become pregnant who has OHSS there is no reason why the pregnancy should be any more likely to fail.

Can OHSS develop again in a future treatment?

There is a tendency for this condition to recur. If one treatment has resulted in OHSS, the dosage of drugs will be adjusted in any future treatment to take this into account and lessen the possibility of recurrence.

If you are receiving Gonadotrophin drugs for fertility treatment at this centre and develop the symptoms described above, call us without delay.

Telephone No. (024) 76 968856 (nurse helpline)

(024) 76 96 8879 (office hours)

(024) 76 96 7000 (out of hours, weekends and emergencies)

The Trust has access to interpreting and translation services. If you need this information in another language, please contact the Quality Manager on (024) 76968864, and we will do our best to accommodate your needs. The Trust operates a smoke free policy.

Document History

Author: S Keaveney/S Keay
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Contact Tel No: (024) 76968879
Doc. Location: QM computer, I drive (patient information)
Version: GEN-PI-000190V5
Reference No: Quality/information sheets/OHSS patient info
Review Date: March 2024
Revision History: August 2019 (no changes), July 2020 (no changes), September 2021 (amends), March 2023 (amends)