

Ovarian Hyperstimulation Syndrome (OHSS)

What is OHSS?

OHSS is Ovarian Hyperstimulation Syndrome.

Successful IVF needs controlled ovarian hyperstimulation because the more healthy eggs retrieved at egg collection the more likely the patient is to become pregnant. Even if her first embryo transfer does not work, frozen embryos in reserve give her a second chance to conceive.

Unfortunately, the drugs used to help a woman's ovaries produce more eggs may harm her if they work 'too well'. In addition, the temporary hormonal upsets that follow producing too many eggs may make pregnancy less likely until her body has had a chance to calm down. This over-activity is OHSS.

For many women, this is no more than a minor nuisance. But, in some cases, it can be serious. When MFS offers ovarian stimulation it is done so with great care, and the patient is asked to contact the unit should she develop any unusual abdominal pain, distension or breathlessness.

Severe OHSS is a rare but serious complication of the use of fertility drugs such as Gonal F, Menogon, Puregon, or Metrodin HP. It occurs in less than 0.3% of treatments at MFS, and it happens so rarely because the clinical staff actively search for it to prevent it from happening. Despite such vigilance, it cannot always be predicted. This leaflet is given to every patient who uses these medicines, and a copy is sent to their GPs.

OHSS usually occurs when too many follicles (usually more than twenty) develop. This is usually prevented by using the lowest possible dose of drugs so that the patient produces enough eggs to give a reasonable chance of pregnancy with some to spare, but without the danger of producing too many.

However people respond unpredictably to drugs and either do not respond at all or over-respond. When too many follicles develop there are two choices:

- to stop treatment and start again with a lower dose of drugs
- or, to continue, and then freeze all the suitable embryos for use in the future

What are the symptoms of OHSS?

Symptoms of OHSS usually begin about four to five days after the late-night injection of hCG (Choragon, Gonasi, or Pregnyl) with pain or swelling in the abdomen.

When ovaries respond too well, follicles make lots of the natural hormone oestrogen, which has many effects, including making blood more likely to clot inside blood vessels. As well as this, each follicle can hold as much as a cupful of fluid, which means that many follicles together can drain lots of fluid from the blood-stream, compress abdominal organs and cause pain.

Problems occur when the amount of fluid retained by enlarged ovaries or which enters the abdominal cavity leads to blood 'sludging' or fluid seeping into the lungs. As the ovaries grow, vomiting may start, or the patient may produce less urine as her blood thickens. This 'sludging' could lead to blood clots but may be reduced by **drinking more water** and exercising gently and often.

Some discomfort is usual for a few days after egg collection and needs only mild painkillers. Most cases of OHSS settle with aspirin, **drinking more water**, and gentle exercise.

In more severe cases, abdominal distension and pain, vomiting, diarrhoea, shortness of breath, dizziness and headaches may happen. The most serious complication is loss of water from the woman's circulation which, if not treated, could lead to kidney failure, or blood clotting inside her blood vessels (which could lead to stroke or a heart attack).

Preventing, identifying and treating OHSS

The first step is to prevent the problem. If a patient develops too many follicles the MFS nurse or doctor will warn her well before there is any risk, and discuss delaying treatment. After egg collection, if she has abdominal pain that increases rather than settles in a day or two, she should notify MFS, especially if she feels sick or starts to vomit.

Should this happen she should return to MFS. If the clinic detects mild overstimulation, she will be asked to return in a couple of days. If the condition is severe, MFS may suggest she be admitted to hospital.

Drink lots of water. Tea, coffee, and alcohol can all make dehydration worse. The patient should be passing normal amounts of urine because dark, concentrated urine is a sign of dehydration.

Paracetamol or aspirin are suitable painkillers. If they not help, the patient should seek medical advice, especially if she is unable to keep down fluids without being sick. Gentle exercise, such as walking, helps keep blood flowing through the veins and kidneys and will improve general health.

Hyperstimulation does not mean treatment has not worked, and, because it may get worse if the patient conceives, MFS may suggest delaying pregnancy by freezing embryos rather than transferring them in the days after egg collection. If so, MFS will continue to monitor the patient and once her ovaries have returned to normal her embryos may be transferred. There is no additional charge when embryos are frozen for the patient's safety.

During treatment, any patient worried about OHSS should call MFS on 01922 455911. Out of hours, the MFS telephone is diverted to a senior member of staff. GPs are advised of patients' treatment and will be able to recognise the signs if something is going wrong, and, if necessary, refer her to hospital.

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