

Ovarian Hyperstimulation Syndrome (OHSS)

What is OHSS?

OHSS can be a complication of ovarian follicle stimulation after fertility treatment with either tablets called Clomiphene Citrate or injections of recombinant FSH (rFSH) called Puregon or Gonal F. The word 'syndrome' is used because there are many different signs and symptoms, but not all of them are necessarily present.

Many women who undergo an IVF, stimulated IUI or Ovulation Induction cycles, will develop some mild signs. Severe OHSS is much less common, but may be life threatening so hospitalisation and careful monitoring is necessary. With severe OHSS, fluid shifts from the blood circulation to other areas such as the abdomen and lungs. The cause is unknown but it occurs when ovaries are stimulated and then exposed to the hormones LH (Luteinising Hormone) and hCG (human Chorionic Gonadotrophin). This can occur to any degree in women undergoing an IVF cycle. It may also occur in women having ovarian stimulation for inseminations and ovulation disorders, but is usually less severe as the dose of fertility drugs used is lower than in IVF treatment.

OHSS is not caused by exposure to LH alone. The hCG hormone exposure occurs through

- a) the trigger injection
- b) a pregnancy.

Women who are at a slightly higher risk for OHSS:

- Polycystic ovarian syndrome
- Estradiol (E₂) level greater than 7,500 pmol/litre
- Greater than 10 follicles on scan before egg collection
- Large number of small follicles at the time of egg collection
- Under 30 years of age
- Low BMI
- Previous OHSS

What can be done if the doctor suspects I am at a high risk of developing OHSS during my cycle?

- If the risk is detected early in the cycle, the doctor may suggest stopping the cycle and starting the next cycle with a lower dose of drugs. This is indicated by Day 7 Estradiol (E₂) level being greater than 3,500 pmol/l with multiple follicles less than 10mm in size.
- If the doctor is concerned at the time of the egg collection, it may be recommended that all of the fertilised eggs are frozen and no fresh embryo transfer occurs in that cycle. This avoids the possibility of OHSS being caused and or exacerbated by the hCG hormone, should a pregnancy occur. The frozen embryos can be replaced in frozen embryo replacement (FER) cycles once the risk of OHSS is gone (after three normal periods).

What Should I Look For?

Your doctor will determine at the egg collection if you are at risk for OHSS and will advise you of this at that time. The level of risk is based on how many follicles have developed and your estrogen (E₂) hormone level. The most common time to develop OHSS is in the week after the egg collection. Should you become pregnant, the syndrome could be made temporarily worse by the hormone (hCG) produced naturally in pregnancy.

Please discuss with a nurse or doctor if you experience:

Mild OHSS

- * an uncomfortable 'bloated' abdomen
- * nausea and / or vomiting
- * diarrhoea

Moderate OHSS

- * all of the above symptoms plus
- * 'flu' like symptoms and shortness of breath
- * reduced urine output
- * gradual weight increase of 1 kg per day
- * tissue swelling in the upper thighs, the pubes, and lower abdomen

Severe OHSS

- * all of the above symptoms plus
- * difficulty in breathing
- * dehydration
- * pain up around the ribs

Should you develop any of these symptoms, it is important to ring Fertility Plus as soon as possible. Blood tests and an abdominal scan may be done to check for excess fluid in the abdomen and assess the size of the ovaries.

What happens if I develop symptoms of OHSS?

Mild OHSS usually disappears quite quickly - it rarely takes more than a week or two to abate, particularly if you are not pregnant. Should you develop moderate or severe OHSS then you may require hospital admission where we can correct any dehydration, assess kidney function and possibly drain some of the fluid from the abdominal cavity.

It is important you understand this information and keep in contact with the Fertility Plus should you have any areas of concern or feel you are developing OHSS.

If you have any urgent concerns outside clinic hours ring the duty manager for Women's Health on 09 638 9909 and they will advise you.