Ovarian Hyperstimulation Syndrome (OHSS) Information Sheet

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 AIH or Ovulation Induction cycle, will develop some mild signs. However severe OHSS is much less common, but may be life threatening so hospitalisation and careful monitoring will be necessary. 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 and hCG (human Chorionic Gonadotrophin).

It 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 is less.

OHSS is not caused by exposure to LH alone. The hCG hormone exposure is through:
- the trigger injection
- a pregnancy.

People who have a slightly higher risk:
- Polycystic ovarian syndrome
- Previous OHSS
- Estradiol (E2) level greater than 7,500 pmol/litre
- Greater than 10 follicles on scan before pick-up
- Large number of small follicles at the time of Egg Pick-up
- Young age, under 30 years
- Thin women

What can be done if the doctor suspects 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.
- If the doctor is concerned at the time of the egg pickup, it may be recommended that all of the fertilised eggs are frozen and no embryo transfer occurs in that cycle. This avoids the possibility of OHSS being caused by the hCG hormone, should a pregnancy occur.
What Should I Look For?

Your doctor will almost always know at the egg pick-up if you are at risk from OHSS and will warn you then. The risk degree 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 pick-up. Should you become pregnant, the syndrome could be made temporarily worse by the hormone (hCG) produced naturally in pregnancy.

As a general precaution we ask all women who have undergone a stimulation cycle to ring the Clinic on Luteal Day 6.

Please discuss with the nurse / doctor if you experience:

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

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

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

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

If you have any urgent problems outside clinic hours you can ring the Duty manager for Women’s Health on 6389909 and they will advise you.

What Happens Next?

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

Prevention

- Very rarely the IVF cycle will be stopped quite early if it appears severe hyperstimulation is a problem in that cycle. This is indicated by Day 7 Estradiol (E2) greater than 3,500 pmol/l with multiple follicles less than 10mm.
- In more moderate cases the cycle may proceed to pick-up but with no fresh transfer of embryos, since pregnancy can make OHSS worse. The embryos will be frozen in preparation for replacement when the risk is lessened, in the next few cycles (after three normal periods).
- 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.