



Fact Sheet

From ReproductiveFacts.org



The Patient Education Website of the American Society for Reproductive Medicine

Ovarian Hyperstimulation Syndrome (OHSS)

What is Ovarian Hyperstimulation Syndrome?

Ovarian Hyperstimulation Syndrome (OHSS) is an exaggerated response to the use of ovulation induction medications, especially during the use of injectable gonadotropin agents. However, it can, on rare occasions, be associated with the use of clomiphene citrate or gonadotropin-releasing hormone. Women with OHSS have an increase in fluid leaking from the blood capillaries causing symptoms that range from bloating to nausea to swelling of the abdomen. On rare occasions, women have to be hospitalized when symptoms are more severe. OHSS is most common in women who are having IVF when serum estradiol levels are high (often >2500 pg/ml). It is most likely to develop when a large number of ovarian follicles (immature eggs) have developed.

How do you classify the severity of symptoms associated with OHSS?

OHSS can be classified as mild, moderate or severe, based on symptoms and laboratory findings. One out of three women have some symptoms of mild OHSS when they have controlled ovarian stimulation during IVF cycles. These symptoms include abdominal bloating and nausea and weight gain due to fluid retention (when fluid is not removed from the body tissues). These same symptoms are worse in women with moderate OHSS. Women with severe OHSS usually have vomiting and cannot keep down liquids. They have an increase in discomfort from distention (swelling) of the abdomen (belly). In the worst cases, they can develop shortness of breath. Ovary size is also used as a marker of OHSS. If you have symptoms, a transvaginal ultrasound can be done to measure ovary size.

How is OHSS treated?

Mild to moderate OHSS is treatable with decreased activity, monitoring the amount of fluids you are taking in and how much urine you are putting out, and medicines for nausea. Severe OHSS is treated in the hospital. At the hospital, the doctor will give you an IV (intravenous hydration), medicines for nausea, watch you closely and may remove fluid from your abdomen. Other supportive therapy may be given as needed.

What other complications occur with severe OHSS?

Complications from OHSS can be severe. You may become dehydrated (severe loss of fluid from the blood stream) and pressure may increase from too much fluid in the abdomen. These factors increase the risk of blood clots forming within the blood vessels. Blood clots can travel to your lungs or to other important organs. This can be potentially life-threatening. These complications can almost always be avoided by recognizing the signs, symptoms and laboratory evidence that OHSS is getting worse. Then appropriate treatment, inside or outside of a hospital, can be given. In some cases, you might have to take medicine to prevent blood clots.

How long does it take for OHSS to get better?

OHSS symptoms usually appear a few days after ovulation is triggered with injection of hCG. These symptoms will usually go away within a week, unless pregnancy occurs. Pregnant women will continue to have OHSS symptoms for 2 to 3 weeks or more after a positive pregnancy test. These symptoms gradually go away, and the remainder of the pregnancy is unaffected.

Important Points

- Mild to moderate OHSS is relatively common after ovarian stimulation for IVF or ovulation induction.
- Women need to be seen by their treating physician or another physician familiar with assisted reproductive technologies (such as an REI physician) as soon as they have symptoms. A standard gynecologic pelvic examination is NOT generally recommended because the ovaries are enlarged and the cysts that are present may burst open under pressure.
- Mild to moderate OHSS (with tolerable nausea, vomiting and abdominal swelling) can often be treated at home with decreased activity, drinking fluids, medication for nausea, careful monitoring and frequent doctor visits.
- Severe OHSS (with continued vomiting, severe swelling of the abdomen, shortness of breath or noticeable laboratory abnormalities) requires hospitalization for treatment and intensive monitoring.

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