Ovarian Hyperstimulation Syndrome

Symptoms and treatments

What is ovarian hyperstimulation syndrome?

Ovarian hyperstimulation syndrome (OHSS) is a condition that can occur when some fertility medicines are used. The risk of OHSS increases when levels of estradiol are very high, or when there are a lot of mature follicles after your HCG trigger shot (this shot causes follicles to mature and release mature eggs).

Up to 10% of women (10 out of 100) who have ovulation induction with HCG develop some degree of OHSS. Most affected women have only a mild to moderate form. Severe OHSS occurs in fewer than 1% of women (1 out of 100). OHSS occurs in fewer than 1% of women (fewer than 1 out of 100) who have used clomiphene (brand names Clomid or Serophene) or other oral medicines to induce ovulation.

OHSS is a temporary condition. It goes away on its own after 1 to 2 weeks. Because of this, treatment of OHSS focuses mainly on making you more comfortable until your symptoms improve.

What causes OHSS?

OHSS is not completely understood. It may be that hormone levels that are already high from ovarian stimulation, combined with the HCG shot that triggers ovulation, lead to it. Women who develop many small follicles are most likely to develop OHSS.

After HCG is given, the ovaries become bigger and produce large amounts of hormones and other secretions that cause blood vessels to become “leaky.” Fluid from the bloodstream then leaks into the abdomen and chest. At the same time, the amount of fluid in the bloodstream decreases and the blood becomes more concentrated. This can cause kidney problems, electrolyte imbalance, and an increased risk of blood clots.
What are the symptoms of OHSS?

*Mild to Moderate OHSS*

The most common first symptoms of mild to moderate OHSS are:

- Abdominal bloating
- Abdominal discomfort
- Weight gain (up to 10 to 15 pounds of fluid weight)
- Nausea
- Constipation
- Enlarged ovaries

*Severe OHSS*

As the blood becomes more concentrated, these symptoms occur:

- Severe abdominal pain and bloating
- Nausea and vomiting
- Decreased urination and dark urine
- Dizziness when standing up
- Shortness of breath
- Low blood pressure
- Rapid, shallow pulse
- Fluid buildup in the abdomen or lungs
- Electrolyte imbalances
- Weight gain (more than 20 pounds)

In severe OHSS, the enlarged ovaries may be more likely to *rupture* (break open) or twist. This causes pain and, very rarely, internal bleeding. This is why we recommend that all IVF patients, but especially patients with OHSS, limit their physical activity.

Severe OHSS is rare, but when it occurs it is a serious condition that must be treated right away. It requires many follow-up visits in the clinic, and it may require a hospital stay.

**How is OHSS prevented?**

With close monitoring, we can avoid most cases of severe OHSS by:

- Not giving HCG, or reducing the dose
- Using another medicine to trigger ovulation
Questions?

Your questions are important. Call your doctor or other UWMC health care provider if you have questions or concerns.

University Reproductive Care: 206-598-4225
Website: http://depts.washington.edu/obgyn/URC

- Not giving HCG until the estrogen levels fall – this is called “coasting”
- Canceling treatment when blood and ultrasound information suggest there may be too high a risk of OHSS
- Freezing all embryos to allow OHSS to resolve, and then transferring embryos in a later cycle
- Giving daily injections of leuprolide (Lupron) for several days

How can I lower my risk of OHSS?

The risk of OHSS is higher in women who achieve pregnancy. If we think that you might be at risk for OHSS, we will ask you to do these things after your HCG injection:

- Drink at least 6 glasses of an electrolyte-rich drink, such as Gatorade. Do not drink plain water after your injection.
- Weigh yourself each morning before eating or drinking anything.
- Check the color and amount of your urine.
- Report your weight and urine output to your University Reproductive Care team daily so that we can advise you about OHSS management, if needed.

When to Call the Clinic

Call the clinic if:

- You are gaining more than 2 pounds a day
- Your amount of urine is low or your urine looks dark

Call the clinic right away if you have:

- Nausea or vomiting
- Severe abdominal pain

We will ask you to come in for an exam that includes ultrasound and blood tests. We may need to see you every day for retesting and treatment until your symptoms improve. You may be given intravenous (IV) fluid in the clinic or hospital.

If your symptoms are severe, we may need to drain the fluid from your abdomen through your abdominal wall or vagina. You may also need to start taking a blood-thinning medicine to prevent a blood clot.