

# Ovarian Hyperstimulation Syndrome

## *Symptoms and treatments*

*This handout explains ovarian hyperstimulation syndrome. This condition can occur when some fertility medicines are used.*

### **What is ovarian hyperstimulation syndrome?**

*Ovarian hyperstimulation syndrome (OHSS) is a condition that can occur during or after:*

- *An in vitro fertilization (IVF) cycle*
- *Controlled ovarian hyperstimulation (COH)*
- *Controlled ovulation induction (COI)*

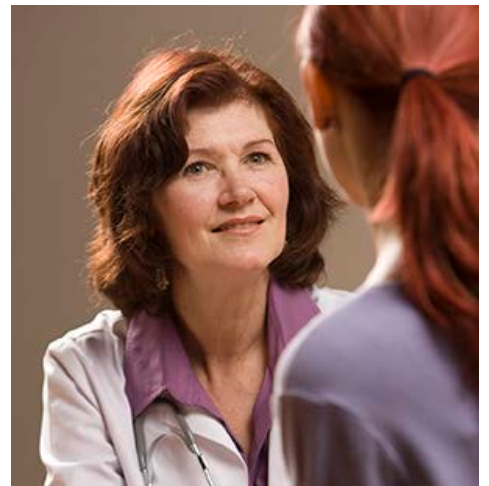
OHSS is a short-term condition. After 1 to 2 weeks, it usually goes away by itself. But, OHSS may last longer when pregnancy occurs.

### **What causes OHSS?**

We do not fully understand the cause of OHSS. We believe that both the hormones from the ovary and the injectable hormones used to trigger ovulation play a role.

After an ovulation trigger shot is given, ovaries enlarge. They may produce high levels of hormones, which cause blood vessels to become “leaky.” Fluid from the bloodstream can then leak into the belly, legs, feet, and rarely, the lungs.

With less fluid in the bloodstream, the blood becomes more concentrated. This can cause belly bloating and discomfort, electrolyte imbalance, and a higher risk of blood clots.



*Talk with your fertility specialist if you have any questions about OHSS.*

## How is it treated?

Because OHSS usually goes away on its own, most treatments focus on comfort and support until symptoms improve.

## Who is at risk for OHSS?

Your risk of OHSS increases if:

- Your levels of *estradiol* (a type of estrogen) are very high
- There are multiple developing *follicles* (egg sacs) during your infertility treatment
- You have many eggs retrieved
- You have:
  - An ovulation disorder such as *polycystic ovarian syndrome* (PCOS)
  - High levels of *anti-mullerian hormone* (AMH)

OHSS may get worse after your ovulation trigger shot. This shot causes follicles to mature and prepare eggs for release.

Between 1 and 5% of women (1 to 5 out of 100 women) who are treated with fertility drugs may have a moderate to severe degree of OHSS. Most affected women have only a mild to moderate form. Severe OHSS occurs in less than 1% of women (fewer than 1 out of 100 women).

## What are the symptoms of OHSS?

### Mild to Moderate OHSS

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

- Belly bloating and discomfort
- Weight gain (up to 10 to 15 pounds of fluid weight)
- Nausea
- Constipation
- A sense of fullness in the pelvic area (caused by enlarged ovaries)

### Severe OHSS

As the blood becomes more concentrated, these symptoms occur:

- Severe belly pain and bloating
- Nausea and vomiting

- Decreased urination and dark urine
- Dizziness when standing up
- Shortness of breath
- Rapid, shallow pulse
- Trouble breathing (caused by fluid buildup in the belly or lungs)
- Electrolyte imbalances (shows on lab work)
- Weight gain of more than 20 pounds

## About Severe OHSS

In severe OHSS, enlarged ovaries may be more likely to twist. Follicles are more likely to *rupture* (break open) and bleed. This may cause pain and, very rarely, internal bleeding.

This is why we advise all IVF patients, and especially patients with OHSS, to limit high-impact physical activity such as running or jumping.

Severe OHSS is rare. But it is a serious condition. If you get severe OHSS, you must be treated right away. You will need many follow-up visits in the clinic, and may even need a hospital stay.

## How is OHSS prevented?

With close monitoring, we can usually avoid severe OHSS. This is why we may advise:

- Freezing all embryos to allow OHSS to resolve. We then transfer an embryo in a later cycle (*frozen embryo transfer cycle*).
- Using a medicine called Lupron to trigger ovulation.
- Avoiding the use of HCG (pregnancy hormone) for ovulation trigger, or reducing the dose (this is less effective and rarely used).
- Canceling treatment when blood and ultrasound tests suggest the risk for severe OHSS is very high.
- Giving a medicine called Cabergoline, both at the time of the ovulation trigger and after the egg retrieval.
- Giving a medicine called Letrozole after the egg retrieval.

## How can I lower my risk of OHSS?

If we think that you might be at risk for OHSS, we will ask you to do these things after your ovulation trigger:

- Stay hydrated with electrolyte-rich drinks such as coconut water, Gatorade, or water with electrolyte tablets such as Nuun
- Weigh yourself each morning **before** you eat or drink anything
- Check the color and amount of your urine
- Report your weight and urine output to your University Reproductive Care (URC) team every day

When you report to URC, we will tell you if there are any other steps you need to take to prevent or manage OHSS.

## When to Call the Clinic

Call 206.598.4225 weekdays from 8 a.m. to 5 p.m. if you have **any** of these symptoms:

- You are gaining more than 2 pounds a day
- You urinate less than a cup of urine in 8 hours
- Your urine looks dark

## Urgent Care

Call us **right away** if you have:

- Nausea or vomiting
- Severe belly pain

If it is after clinic hours, call 206.598.3300 and ask to page the provider on call.

## If You Have Symptoms of OHSS

If you call us with OHSS symptoms, we will ask you to come to the clinic. At your visit, we will do an ultrasound exam and blood tests.

We may need to see you every day for retesting and treatment until your symptoms improve. If needed, 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 belly through your belly wall or vagina. You may also need to start taking a blood-thinning medicine to prevent a blood clot.

### Questions?

Your questions are important. Call your doctor or healthcare provider if you have questions or concerns.

University Reproductive Care:  
206.598.4225

Clinic hours: Weekdays from  
8 a.m. to 5 p.m.

Website:  
[www.uwmedicine.org/uwfertility](http://www.uwmedicine.org/uwfertility)