

# Recurrent spontaneous OHSS in a 10 week pregnant: A case report

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## ABSTRACT

Ovarian hyperstimulation syndrome (OHSS) most often occurs in the context of assisted conception like in-vitro fertilization (IVF). OHSS can be a reason of acute abdomen. USG is very important in the diagnosis of OHSS. Severe complications can be seen in OHSS. Incidence of OHSS is increasing in recent years, so this situation should be kept in mind and the early diagnosis of OHSS is very important.

**Key Words:** Spontaneous OHSS, recurrent OHSS, pregnancy

## Introduction

OHSS is a clinical condition that often seen in assisted reproductive treatments by the cause of drugs. It generally occurs with exogenous gonadotropins and less frequently with clomiphene citrate. OHSS can be serious and threat women life. The incidence of OHSS varies between percent 0.6-10 during IVF treatment (1). OHSS makes patients to feel discomfort due to the peritoneal irritation. In this syndrome ovarian follicular count is increased and ovarian size is enlarged. Abdominal free fluid can be seen. The most important sign is peritoneal irritation with the presence of abdominal free fluid (2,3). Spontaneous OHSS is a serious complication of ovarian stimulation. Moreover, spontaneous recurrent OHSS is an extremely rare gynecologic complication. In here we presented a spontaneous and recurrent OHSS case.

## Case report

A 23 year old woman was presented to the Van Yüzüncü Yıl University Hospital with the complains of abdominal pain. The patient had an appendectomy as a surgical history. Physical examination revealed peritoneal irritation with normal vital signs, and ultrasound examination showed that the CRL of fetus was 30 mm and 10 weeks of gestation and enlarged bilateral ovaries with multiple follicles were detected (Figure 1).



Fig. 1. Hyperstimule left adnex.

We measured the right ovary approximately as 86x68 mm, and the left ovary was measured as 71x71 mm. Free fluid in douglas (36 mm in vertical depth) was also detected. A diagnosis of spontaneous ovarian hyperstimulation syndrome (OHSS) was made. Our patient also had a history of OHSS in her previous pregnancy laboratory testing revealed leukocytosis and hematuria pathological and normal concentrations of haemoglobin, haematocrit, platelets and other laboratory studies including serum electrolyte panel, renal function, coagulation profile, and liver function tests were within normal limits. We started LMWH as a prophylactic treatment.

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## Discussion

OHSS is characterized by the hyperstimulation of ovaries. It is mostly seen during ART (Assisted Reproduction Treatments). It is mostly iatrogenic and this syndrome is a life threatening situation. OHSS is characterized with enlarged ovaries, multiple cysts, stromal edema, increased capillary permeability, and the escape of fluids to the third spaces. As a result intravascular volume decreases and hypovolemic shock, renal insufficiency and thromboembolia can be seen (4). OHSS can be classified as mild, moderate and severe. In the pathophysiology mediators such as VEGF (vascular endothelial growth factor) play role (5). Risk factors for OHSS can be listed as; HMG use, polycystic ovaries, young age, high serum E2 levels, low body mass index, multiple pregnancy, hydatiform mole and pregnancy. In all of the reasons of OHSS there is high levels of hCG is seen (6).

In the literature there are very rare spontaneous OHSS cases. A case of spontane OHSS in PCOS patient was presented by Zalel et al (7). Ayhan et al. (8) reported a case of 12 week gestation with severe spontaneous OHSS. In general, OHSS is seen at the beginning of pregnancy and it is difficult for pregnancy to continue after first trimester due to the OHSS. Di Carlo et al. (9) reported two case of familial, recurrent, and spontaneous ovarian hyperstimulation syndrome ending in a successful pregnancy. Like these cases our case is 10 weeks and spontaneous and recurrent OHSS. We are following this case respect with the progress for pregnancy. Also recently Tokmak et al. (10) showed a case in term pregnancy with spontaneous OHSS. In this case they have made successful C/S and at the same time they have treated the cysts with electrocooter. At the time of birth in the case of the hyperstimulated ovaries surgical drainage can be a treatment option.

Clinical importance of OHSS should be recognized by clinicians. In conclusion in early pregnancy OHSS cases should be kept in mind and OHSS should be managed carefully.

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