A case of severe early-onset OHSS after GnRH-agonist triggering

To the Editor:

I read with interest a recent article by Griesinger et al. (1) describing, for the first time in the English literature, a case of severe ovarian hyperstimulation syndrome (OHSS) after GnRH agonist trigger of ovulation. However, the clinical details of the case cast serious shadow as to the correct diagnosis.

The hallmark of severe OHSS is elevated hematocrit (>45%, or >30% increment more than baseline values) secondary to hemoconcentration (2). However, the described patient experienced severe intraperitoneal hemorrhage leading to decreasing hematocrit (41% on day of trigger, 37% on day of oocyte retrieval). Blood transfusion was given (no details on amount) due to "drastic decrease of hemoglobin levels to 4.9 mmol/L," with hematocrit "<35% with infusion therapy." No specific measurement is given.

In addition, other severe OHSS clinical correlates (white blood cell [WBC] >15,000/μL, oliguria, elevated creatinine, liver dysfunction, anasarca) were not given.

The investigators conclude that the clinical picture was "indicative of a subacute intraperitoneal hemorrhage" and they are correct. Therefore, why was a diagnosis of severe OHSS was made? In addition, why was low molecular weight heparin given (which probably contributed to the hemorrhage)?

On the day of trigger the patient's E_2 level was 47,877 pmol/L but only 13 oocytes were retrieved. One may speculate that a technically difficult pick-up lead to retrieval of only a fraction of the available follicles. The rest just ovulated to the pelvic cavity, together with massive bleeding (3.9 L of "blood-stained ascites").

Most readers pay special attention to the conclusion section in the abstract which reads: "Agonist triggering with cryopreservation is efficacious and safe, although a single case of a severe early-onset OHSS occurred." This sentence is misleading and must be corrected.

Shahar Kol, M.D.
IVF Unit, Rambam Medical Center, Haifa, Israel

June 8, 2011

doi:10.1016/j.fertnstert.2011.06.057

REFERENCES

1. Griesinger G, Schultz L, Bauer T, Broessner A, Frambach T, Kissler S. Ovarian hyperstimulation syndrome prevention by gonadotropin-releasing hormone agonist triggering of final oocyte maturation in a gonadotropin-releasing hormone antagonist protocol in combination with a "freeze-all" strategy: a prospective multicentric study. Fertil Steril 2011; 95:2029–33.
2. Navot D, Bergh PA, Laufer N. Ovarian hyperstimulation syndrome in novel reproductive technologies, prevention and treatment. Fertil Steril 1992;58: 249–61.