

## Letter to the Editor / Editöre Mektup

## First trimester adnexal torsion in a woman after in vitro fertilisation treatment

### İn Vitro Fertilizasyon Tedavisi Sonrası İlk Trimesterde Görülen Adneksiyal Torsiyon

İlker SELÇUK<sup>1</sup>, Gökhan BOYRAZ<sup>1</sup>

Sayın Editör,

Adnexal torsion is a true gynecological emergency that has an incidence of 2.7% (1). Moreover adnexal torsion is commonly seen in reproductive ages and has an incidence of 1/5000 in pregnancy (1). Here we try to emphasize the risk of adnexal torsion in pregnancy after ovulation induction.

A 27-year-old, primigravid woman admitted to our hospital with the complaint of acute left lower abdominal quadrant pain. She was at the 10<sup>th</sup> week of gestation and the pregnancy was achieved after intracytoplasmic sperm injection (ICSI). She was in normal body mass index and the reason for ICSI was unexplained infertility. She had a non-disturbing ICSI procedure; a conventional step-up protocol was applied and had no complication like high response or ovarian hyperstimulation syndrome throughout the fertility treatment. She was afebrile and there were not any vaginal bleeding, vaginal discharge, dysuria or vomiting. Abdominal sonography revealed an enlarged left ovary measuring 85x50 mm with a solid-cystic, heterogeneous image and a small amount of fluid at the pouch of Douglas. The vascularization of the ovary was peripherally and diminished. In view of these findings an explorative laparoscopy was carried out. The laparoscopy revealed a twisted left adnexa with an enlarged cystic and necrotic ovary (Figure), the other ovary was normal at the exploration. Untwisting of the adnexa was not successful and we performed left adnexectomy laparoscopically. The histopathology report revealed a hemorrhagic necrosis. After the operation we did not need to apply progesterone pills and the pregnancy succeeded in a term healthy baby with cesarean section.



Figure demonstrates the twisted necrotic adnexa at laparoscopy.

Although adnexal torsion during pregnancy is a rare condition, it is seen more frequently in the first trimester; seldomly in the second and third trimester (2). Ovarian stimulation has a role on adnexal torsion that encountered in the first trimester (1). Having multicystic ovaries in the first trimester is a potent risk factor for adnexal torsion (3). Additionally having functional cysts may increase the risk of ovarian torsion

especially if they are  $\geq 5$ cm in diameter (4,5). After ovarian stimulation, the incidence of adnexal torsion in pregnancy rises to 6% and reaches up to 16% in cases of ovarian hyperstimulation syndrome (6).

Sometimes sonography and doppler study may not help for the correct diagnosis and in such cases magnetic resonance imaging should be considered (5).

Laparoscopy is a good and successful way of managing this problems; that recently single-site laparoscopic procedures are also being performed in pregnancy for the wellness of patients without any damage (7). Gorkemli et al. (8) evaluated adnexal torsion especially in in-vitro fertilisation (IVF), ICSI patients and stated the importance of ovarian preserving for ovarian reserve.

As a conclusion; despite various differential diagnosis, if a pregnant woman comes with a deep disturbing pelvic pain; especially after ovarian stimulation, you should firstly make the differential diagnosis of ovarian torsion.

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<sup>1</sup>Department of Obstetrics and Gynecology, Hacettepe University Faculty of Medicine, Ankara, Turkey

Corresponding Author:

Dr Ilker Selcuk

Department of Obstetrics and Gynecology, Hacettepe University Faculty of Medicine, 06100 Sıhhiye - Ankara, Turkey.

Tel: 090 312 3051801

Fax: 090 312 311 63 72,

email:

ilkerselcukmd@hotmail.com

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