THE IMPACT OF ADNEXAL TORSION ON OVARIAN RESERVE WHEN COMPARED WITH CONTRALATERAL OVARY

G Bozdag1, B. Demir2, P. Tokdemir Calis1, D. Zengin1, B. Dilbaz2
1 Hacettepe University, School of Medicine, Department of Obstetrics and Gynecology
2 Etlik Zubeyde Hanim Women’s Health and Research Hospital

Objective: To evaluate whether reperfusion ischemia negatively affects ovarian reserve in ovarian torsion when compared with contralateral side.

Material and methods: Between January-2008 and August-2012, all patients surgery for ovarian torsion in Department of Obstetrics and Gynecology, Hacettepe University and Etlik Zubeyde Hanim Women’s Health and Research Hospital were retrospectively investigated from patient files and computer based data. Only patients treated with detorsion were included for the study. The exclusion criteria were (1) treatment with oophorectomy of ovarian torsion, (2) concurrently performed endometrioma cystectomy and (3) history of another ovarian surgery at any time. The antral follicles were counted by a physician who was blind to the side that had been twisted. All statistical comparisons were done by Mann-Whitney U test and p ≤ 0.05 were considered as significant.

Results: The mean female age was 28.3±5.8 years. The mean duration between surgery and examination with US was 25.6±12.4 months. The mean antral follicle count on the operated and contralateral ovaries were 12.3±8.6 and 12.2±7.8, respectively (p=0.89). The respective figure for ovarian volume was 9.3±5.7 and 8.4±4.3 cm3 (p=0.51). Among 11 patients seeking for childbearing, 8 of them conceived spontaneously. Of 3 women undergoing infertility treatment, 1 achieved pregnancy with clomiphene citrate and 1 succeed with in vitro fertilization.

Conclusion: The finding of the current study suggests that ovarian reserve reflected by antral follicle count is not compromised in patients treated with detorsion of the twisted adnexa. As a result, the potency of reproduction seems to be encouraging in such women.