Vasopressin effect on operation time and frequency of electrocauterization use during laparoscopic stripping of ovarian endometriomas: a randomized controlled trial

Purpose: To assess the vasopressin effect on operation time, need for electrocauterization frequency and ovarian reserve during laparoscopic stripping of ovarian endometriomas.

Methods: This is a randomised prospective clinical trial, in which twenty patients between 18 and 35 years with unilateral endometriomas were randomly enrolled in two groups of cases and controls. Laparoscopic cystectomy was performed by hydrodissection and stripping method in both groups with diluted vasopressin injected in cases, in contrast to only saline injection in controls. Ovarian hemostasis was achieved by bipolar electrocoagulation. The operation time and frequency of electrocoagulation were compared between two groups. The ovarian reserve was determined by ultrasound examination and laboratory assessment one month before and two months after surgery in two groups. Non parametric data was analyzed by the Mann-Whitney Test. P value less than 0.05 was considered as statistically significant.

Results: The operation time was less in cases than control group, but the difference was not statistically significant (p=0.065). The frequency of electrocoagulation for hemostasis was less in cases than controls but this difference was not statistically significant (p=0.132). The antral follicle count was decreased in both groups two months later, while no significant difference was found between two groups.

Conclusion: This study shows that diluted vasopressin may decreases operation time and electrocauterization frequency during laparoscopic stripping of ovarian endometriomas; however, the difference between case and control group is not statistically significant.