22. OVARIAN FUNCTION IN WOMEN OF REPRODUCTIVE AGE AFTER HYSTERECTOMY

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Introduction. As a core reproductive organ, the ovary has two distinct functions, producing mature oocytes for fertilization and secreting sex hormones to sustain the normal activities of multiple organs.

Aim of study. Ovarian function after hysterectomy has been a focus of research by various authors over many years. However, the nature of changes in the hormonal profile, their chronological sequence, the issue of prognosis and possible preventive measures remain contradictory and fragmentary. This lack of clarity prompted the initiation of this research. The aim of this study was to analyze the function of the ovaries after hysterectomy due to benign gynecological causes in women of reproductive and premenopausal age.

Methods and materials. The current study is based on a prospective analysis of 25 cases involving hysterectomy without ovariectomy in women of reproductive and premenopausal age. The control group comprised 25 healthy women of similar age to the research group. To assess the ovarian function, the serum level of follicle-stimulating hormone (FSH), estradiol (E2) and anti-Mullerian hormone (AMH) were measured preoperatively, on the 10-12th postoperative day, and at 6 and 12 months postoperatively.

Results. Although the initial preoperative level of AMH in the research group (1.63 ±3.36 ng/ml) was higher compared to the control group (0.69 ±0.52 ng/ml) hysterectomy had a negative impact on ovarian function, resulting in a noticeable decrease in AMH level at 6 and 12 months postoperatively (0.39 ±0.22 and 0.33 ±0.32 ng/ml, respectively). The serum level of E2 has an insignificant decreasing trend in the research group (from 137.49 ±60.91 pg/ml preoperatively, to 124.48 ±9.99 pg/ml on the 10-12th postoperative day, and respectively 119.35 ±21.66 pg/ml at 6 months and 133.46 ±50.12 at 12 months postoperatively). However, it recorded a non-significantly lower level compared to the control group (139.90 ±38.17 pg/ml). The preoperative serum FSH level in women undergoing hysterectomy was 14.09 ±11.46 IU/l, representing higher values compared to the control group (8.62 ±3.49 IU/l). Postoperatively, on the 10th-12th day, serum FSH level was 12.03 ±13.75 IU/l, at 6 months the highest level was 18.61 ±15.26 IU/l, and at 12 months postoperatively, it was 12.72 ±8.92 IU/l.

Conclusion. This study aimed to investigate the impact of hysterectomy on ovarian function. The results indicate a significant decrease in ovarian reserve within the first year after the intervention. Counseling, coupled with appropriate hormonal support emerges as a potential strategy to enhance the quality of life of these patients.