POSTPARTUM OVARIAN FOLLICULAR DYNAMICS AND ESTRUS ACTIVITY USING PROSTAGLANDIN F_{2A} IN DAIRY COWS

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Summary. The objective of performed study was to characterize postpartum follicular dynamics of corpus luteum persistens using prostaglandins $F_{2\alpha}$ in dairy cows. Twenty Lithuanian Black and White breed 3-7 year old cows were divided into three groups: two experimental – Group 1(n=13) and Group 2 (n=4), and control – Group 3 (n=3). Before and after treatment with two different prostaglandin $F_{2\alpha}$ commercial formations – Dalmazin® (Group 1) and Estron® (Group 2) ovaries, corpus luteum and follicles were examined by ultrasonography and blood level of progesterone was determined. It was estimated that after treatment with Dalmazin (Group 1) follicle have grown 2.03 mm per day and estrus signs was shown by 92.3 % of animals. In Group 1 follicle were on 2.35 mm larger, estrus signs increased by 17.3 % cows, artificial insemination rates were on 16.6 % higher compared animals in the Group 2 treated with *Estron* ($P<0.05$). In conclusion, Dalmazin have shown significantly higher efficiency for treatment of corpus luteum persistens compared to Estron.

Keywords: cow, corpus luteum, follicles, prostaglandin $F_{2\alpha}$.