Changes in the Quantity of Milk and the PH and Temperature of Rumen Content, after Surgical Treatment of Displaced Abomasum

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Abstract : The objective is to identify changes in the quantity of milk and the pH and the temperature of rumen content after omentopexia. The research was performed in a dairy farm with 550 cows on December 2014 - January 2015. The sample consisted of 10 cows. Left-sided displacement of the abomasums was diagnosed in 5 of them, which was treated by lateral omentopexia according to Dirksen; the rest 5 were used for control. Additional treatment was not applied. A special bolus for measuring pH and temperature was administered to the rumen of healthy cows and cows after the operation. The quantity of milk was registered with the help of herd management program Westfalia DP C21. All data were recorded ones a week in the period of four weeks. Statistically reliable difference in the quantity of milk (p<0.05) between the research groups was observed during the entire research. The major difference was recorded on Week 1 after the treatment (29.18 kg/d); on Week 4, the difference was 13.97 kg/d. During the entire research, rumen pH of Test group was lower than that of the Control group. Statistically reliable difference between the groups was identified on Week 1 (p<0.05). On the period mentioned, the pH of the rumen content of Test group was lower by 0.42 than that of the Control group. On Week 3, the difference increased up to 0.84. On Weeks 1, 2, and 3, statistically reliable (p<0.05) higher temperature was observed in the Test group. Major difference of temperature, 1.81 °C, was recorded on Week 1. On Week 4, the temperature of rumen in the Test group became equal to that of the Control group. After omentopexia treatment, the first four weeks showed the following results: statistically reliable difference in the quantity of milk remains the most obvious in Week 1 after the treatment; cows with left-sided displacement of abomasums were exposed to greater risk of acidosis; they indicated lower pH of rumen content; the first two weeks after omentopexia, rumen content has increased temperature, especially obvious in Week 1.

Keywords : Displacement of the abomasum, omentopexia, acidosis

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