THE EFFECT OF MEDICATION AGAINST MASTITIS ON THE QUANTITATIVE CHANGES OF MILK CONSTITUENTS

E. Aniulis, E. Pamakštienė, S. Japertas

Summary. Antibiotic in combination with anti-inflammatory drug therapy is a major component of subclinical mastitis control. In the present study we have analyzed the quantitative changes in milk constituents (fat, protein, lactose, somatic cell count [SCC] and total bacterial contamination) during the treatment with Synulox-CL, Mamexine, Mastimix and Lyncomycin-F. Subclinical mastitis lowered production of milk fat, protein and lactose, and increased SCC and microbial contamination. Triple application of Mastimix into the affected udder quarters increased milk fat (36 %, p<0.001), protein (22.4 %, p<0.001) and lactose (12.21 %, p>0.1) content, but lowered SCC (28.3 %, p>0.2) and bacterial content (55.7 %, p>0.2). Treatment with Lyncomycin increased milk fat (37.08 %, p<0.001), protein (8.26 %, p>0.4), lactose (0.8 %, p>0.5) content and reduced by 39.3 % (p<0.025) SCC and by 68.7 % (p<0.001) bacterial contamination. Treatment with Synulox-CL and Mamexine decreased milk fat (p>0.1) and lactose contents (p>0.1), but protein content was stable at the pre-treatment level. Somatic cell count decreased not significantly (p<0.005). Fourteen days following the treatment, SCC and bacterial contamination increased.

Keywords: mastitis, milk fat, protein, lactose, somatic cell count, bacterial contamination, treatment, Synulox-CL, Mamexine, Mastimix, Lincomycin-F.