

## BLOOD BIOCHEMICAL AND CYTOLOGICAL INDICES IN HEALTHY AND WITH OSTEOMALATION OR MILK FEVER COWS

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**Summary.** Dry and postparturient cows, investigated by us, had haematological and biochemical indices in physiological norm. Meanwhile, the cows with osteomalation had leukocytes - 11.8-66.0 thousands/ $\mu$ l, lymphocytes - 6.8-56.2 thousand/ $\mu$ l and neutrophils - 6.2-8.0 thousand/ $\mu$ l ( $P<0.05$ ). These cows had Ca  $2.28\pm 0.12$  mmol/l, P -  $1.03\pm 0.27$  mmol/l, Mg -  $0.69\pm 0.13$  mmol/l, total protein only  $64.40\pm 0.74$  g/l ( $P<0.05$ ) on the average in blood sera. The long termed shortage of Ca, Mg and P induces decrease in Hb for cows with osteomalation (the mean up to  $91.40\pm 11.63$  g/l) and increase in number of trombocytes, lymphocytes and granulocytes. The cows with milk fever had Ca  $1.58\pm 0.14$  mmol/l, P  $0.65\pm 0.06$  mmol/l, Mg  $1.46\pm 0.09$  mmol/l ( $P<0,05$ ), trombocytes -  $205.60\pm 16.43$  thousand/ $\mu$ l, leukocytes -  $26,80\pm 5,52$  thousand/ $\mu$ l ( $P<0.05$ ) and neutrophils -  $6.55\pm 0.75$  thousand/ $\mu$ l ( $P<0.001$ ) on the average in blood sera. Ca relation with Mg and P in postparturient, cows with osteomalation or milk fever was out of norm. The increase in aspartate aminotransferase activity was detected in all cow groups, coefficient de Ritise was larger than physiological norm.

**Keywords:** cow, parturient paresis, osteomalacia, hypocalcaemia, hematology, alanin aminotransferase, aspartate aminotransferase, alkaline phosphatase.