

RECONSTITUTION OF THE QUANTITY OF MACROELEMENTS IN BLOOD OF COWS WITH MILK FEVER BY MEANS OF CALCIUM PREPARATIONS

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Summary. The influence of intravenous organic and inorganic calcium compounds with addition of magnesium chloride and glucose (*Gliukosalum* and *Calcium borogluconatum*) on the quantity of calcium, phosphorus and magnesium in blood serum of cows with milk fever was investigated. After 6 hours after intravenous injection quantity of calcium increased 2.3-2.7 times in comparison with initial level. More stable and high increase of calcium level was observed after injection of *Calcium borogluconatum*. Higher increase of the quantity of magnesium (68.1 % above initial level) was observed after injection of *Calcium borogluconatum* as it contains double quantity of magnesium. Increase of the quantity of phosphorus after injection of both preparations which do not contain phosphorus shows that the preparations activate function of PTH gland during some hours after injection helps to restore homeostasis. Treatment by means of both preparations normalise quantity of calcium and magnesium in blood of cows in the period of four days, improves status of cows, reduces clinical signs characteristic to milk fever and restores eating and ruminating reflexes. However cows with milk fever have a weak metabolic regulation, thus after some time, the quantity of investigated macroelements decreases in their blood serum again.

Keywords: milk fever, gliukosalum, calcium borogluconatum, treatment.