CHANGES OF THE CONTENT OF CALCIUM, PHOSPHORUS AND MAGNESIUM IN THE BLOOD SERA OF HEALTHY COWS AND COWS WITH POSTNATAL PARESIS

Anelė Stundžienė, Pranciškus Šakys, Vytautas Špakauskas, Genutė Baltušnikienė,
Lietuvos veterinarijos institutas,
Instituto g. 2, LT-4230 Kaišiadorys, tel. 52 580

Summary. Deficiency of calcium, phosphorus and magnesium in fodder leads to lack of these elements in blood and provokes various diseases. The aim of this work was to determine the dynamics of the content of calcium, phosphorus and magnesium in the blood sera of healthy and sick cows. It was determined that the blood sera of healthy cows contains the following concentrations of inorganic substances: calcium – 2,45–3,25 mmol/l, inorganic phosphorus – 1,51–2,15 mmol/l, magnesium – 0,59–0,98 mmol/l. In the blood serum of cows with postnatal paresis the content of these elements decreases: phosphorus to 0,77±0,17 mmol/l, calcium – 2,16±0,17 mmol/l, magnesium – 0,55±0,09 mmol/l. The treatment of this disease with calcium-magnesium preparations restores the content of calcium, phosphorus and magnesium within the blood serum in five days.

Keywords: calcium, phosphorus and magnesium content in the blood sera of cows, postnatal paresis.