Practical experience with management of metabolic dysbalances in Holstein cows.

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INTRODUCTION:
Postpartum complications, such as rumen indigestion, subclinical ketosis and abomasal displacement are important health problems with a high economic impact on dairy herds. This article describes the practical experience with management of the postpartum complications in Holstein cows on a dairy farm, using Energan oral products (VIRBAC).

PRACTICAL EXPERIENCE:
The practical experience was obtained at the following three clinical diagnoses in Holstein cows on the dairy farm:

1) Ruminal indigestion in fresh cows (2 to 7 days postpartum)
Ruminal indigestion was diagnosed in 3 fresh cows. One cow showed another clinical symptom – metritis; the remaining 2 cows were without any other clinical signs. Energan Pansenstarter in the scheme 2 applicators 4 times every 12 hours was administered to all the 3 cows with diagnosed anorexia, ruminal atony and feed intake reduced to almost zero. The administration of Energan Pansenstarter resulted in the restoration of rumen motility and improved feed intake in all the animals. In the cow with metritis, the situation was complicated due to negative energy balance (presence of ketone bodies in urine). For that particular animal the therapy was successfully supplemented by IV administration of Glucose 20% in combination with Energan Ketose (1 applicator 3 times every 12 hours).

2) Subclinical ketosis in 5 fresh cows (within 30 days postpartum)
The concentrations of BHB were measured during regular monitoring of the fresh cows. The BHB levels were found increased in 5 dairy cows.
The BHB levels in blood were:
sample No. 1 - 1.17 mmol / l
sample No. 2 - 0.92 mmol / l
sample No. 3 - 0.83 mmol / l
sample No. 4 - 0.88 mmol / l
sample No. 5 - 1.99 mmol / l
(the physiological range for the laboratory is 0.1 to 0.8 mmol / l)
The increased levels of ketone bodies in urine were also found in the cows 1, 2 and 5 by using Hexaphan diagnostic strips. The Energan Ketose was administered to all these animals at a dose of 1 to 2 applicators 4 times every 12 hours. The control testing showed that the blood BHB levels in all the animals after the treatment were within the physiological range (as reported by the laboratory);

3) The restoration of rumen microflora and recovery of metabolism after surgical correction of the left abomasum displacement
The Energans Pansenstarter 1 applicator + 1 Energan Ketose 1 applicator 4 times every 12 hours were administered to 3 cows after surgical correction of the left abomasum displacement. The first administration was followed by Glucose 20% IV route; The restored rumen peristalsis and the absence of ketone bodies in urine were found in 2 cows 48 hours later. Only in 1 cow, remaining ketone bodies in urine were found - therefore the 20% Glucose IV was given again plus 2 x 2 applicators of the Energan Ketose every 12 hours; 24 hours later no urinary ketone bodies were found in this cow.

CONCLUSION:
As demonstrated by the field findings, the oral treatment of metabolic disorders in fresh cows can be very effective. It can be recommended as a standard symptomatic therapy of postpartal complications in cows with metabolic dysbalances.

KEY WORDS:
ruminal indigestion, left abomasal displacement, ketosis