

CATOSAL™ (10% Butaphosphan+cyanocobalamin) STERILE SOLUTION TECHNICAL FINDINGS:



Study Report #144.132. Efficacy of Catosal 10% in the Treatment of Ketosis in Cows with Left Abomasal Displacement.

Study Objective:

The objective of this study was to evaluate the efficacy of Catosal™ (10% Butaphosphan+cyanocobalamin) Sterile Solution in the treatment of ketosis in cows recovering from LDA surgery.

Study Design:

This study was a multicenter and randomized clinical study involving four veterinary clinics in Germany. Cows with confirmed ketosis and left displaced abomasums were identified, enrolled and bled prior to treatment and surgery to serve as baseline samples to later assess treatment response. Sixty cows were evaluated in both the Catosal-treated and control groups. The Catosal-treatment group received Catosal @ 5 mL/100 kg I.V. for three consecutive days. The control group received 0.9% Saline I.V. @ 5 mL/100 kg. Follow-up evaluations of both groups occurred at 2, 4, 6, 10, 24, 48, and 72 hours after treatments. Clinical responses measured were rumen activity, feed intake 10 minutes after feeding and total feed intake for the 72-hour period. Physiological parameters measured were liver enzymes, BHB (beta hydroxybutyrate), cortisol, cholesterol and free fatty acids.

Study Results:

The primary response in determining “healthy cows” or response to treatment was equal to or more than three rumen contractions per three minutes.

- At days 2 & 3, the Catosal groups had more healthy cows (P=0.0381 for day 2; P=0.0126 for day 3) (Fig. 1).
- The Catosal-treated group had “healthy” rumen activity earlier than the control group (P=0.0167) (Fig. 2).
- The Catosal group had lower BHB levels than the control group when compared to baseline (Fig. 3).
- The rise of serum cholesterol was less in Catosal-treated cows as well (Fig. 4).
- No differences were seen in any of the other measured outcomes.

No suspected adverse drug reactions were observed during the study.

Study Conclusion:

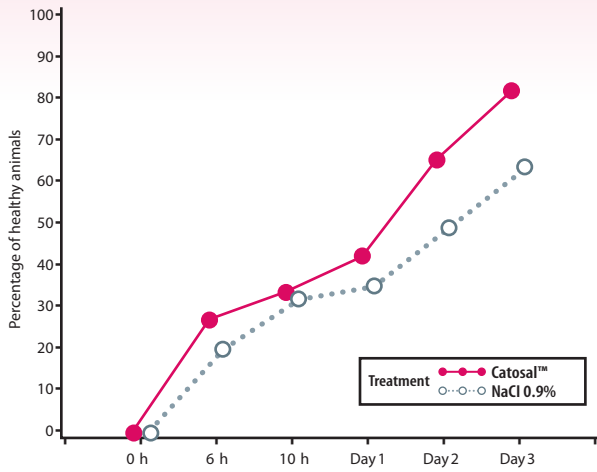
Based on the clinical parameters and the BHB values, Catosal is regarded as safe and efficacious in the treatment of ketosis in cows with left abomasal displacement compared to a negative control group.

Federal law restricts this drug to use by or on the order of a licensed veterinarian.



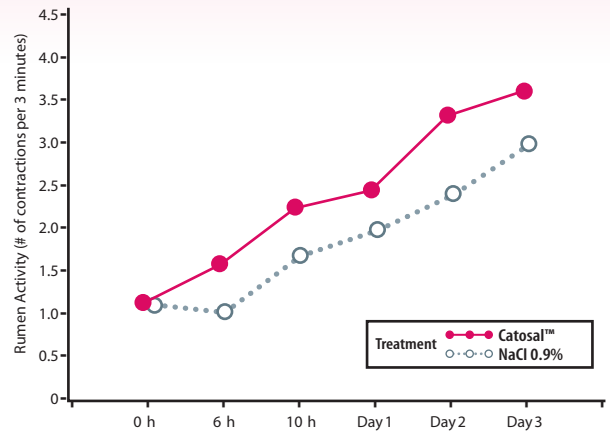
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Figure 1: Prevalences of primary efficacy criteria (healthy animals) by treatment



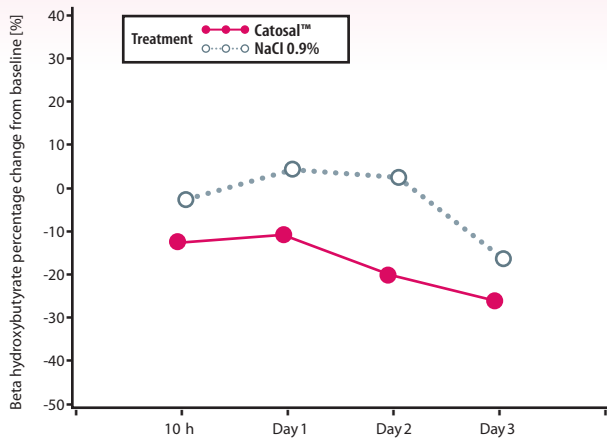
At days 2 & 3, the Catosal™ groups had more healthy cows (P=0.0381 for day 2; P=0.0126 for day 3). Healthy cows were defined as ≥ 3 rumen movements per 3 minutes.

Figure 2: Means of rumen activity by treatment



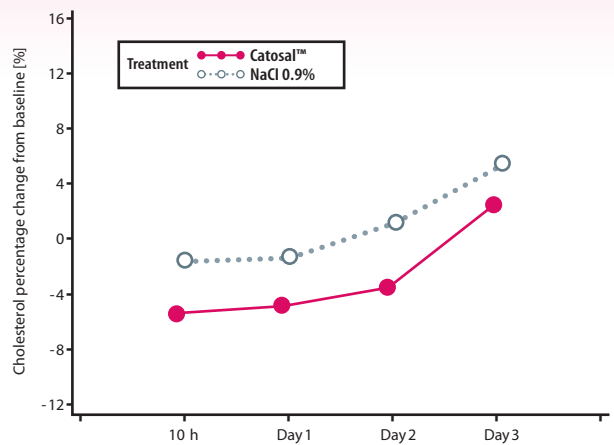
The Catosal-treated group had "healthy" rumen activity earlier than the control group (P=0.0167).

Figure 3: Means of beta hydroxybutyrate percentage change from baseline by treatment



The Catosal group had lower BHB levels than the control group when compared to baseline (P=0.0592).

Figure 4: Means of cholesterol percentage change from baseline by treatment



The rise of serum cholesterol was significantly less in Catosal-treated cows (P=0.0292).



Catosal™
(10% Butaphosphan=cyanocobalamin) Sterile Solution

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