International VETEXPO-2019 Veterinary Sciences Congress September 20-22 2019. Double Tree by Hilton Hotel, Avcilar /Istanbul, Turkey

Invited presentation

Clinical approach to calf diarrhea and treatment principles

Sezgin Şentürk

University of Selcuk, Faculty of Vet Med, Department of Obstetrics and Gynecology, Konya, Turkey

Abstract

The most common causes of death in diarrheic calves are dehydration and acidosis. Treatment of diarrhea in calves is primarily based on correcting the electrolyte, acid-base imbalances, fluid and energy deficits via using of oral and parenteral solutions. Just an oral rehydration therapy is the most effective therapy for mildly or moderately affected diarrheic calves. The best way of treating calves with severe dehydration and acidosis is use of intravenous fluids. Isotonic crystalloids are widely used to treat dehydrated calves with diarrhea. This solutions should be considered to the replacement of interstitial fluid volume. Sodium bicarbonate should be used to in calves with severe metabolic acidosis. Hypertonic crystaloid solutions (e.g., %7.2 hypertonic saline, 4ml/kg, i.v.) are valuable in the initial treatment of endotoxemic calves with diarrhea because of their rapid resuscitative effects. The effects of hypertonic crystaloid solutions can be prolonged by adding colloid solutions (Dextran 70). Administration of colloid solutions causes an increase in plasma volume, which increases the plasma oncotic pressure. Absorption of orally administered fluids can be enhanced by intravenous administration of hypertonic saline-dextran solution. Antibacterials should not be used in calf diarrhea unless indicated. Probiotic and oligosaccharides should be used in calf diarrhea.

Keywords: calf, diarrhea, fluid therapy, metabolic acidosis, antibacterial

*Corresponding Author: Sezgin Şentürk E-mail: sezsen@uludag.edu.tr