

Practice Tips

“Practice Magic”

Moderator: Paul E. Johnson

7% Saline IV, A New Approach to an Old Problem

J. A. Hines, DVM
Adams Marquette Veterinary Service, Inc.
Route 2, Box 80
Oxford, WI 53953

In our practice we became interested in the use of Hyper saline after seeing some research on its use in calves and horses that was done at Ohio State University.

For years we had been using commercial fluid concentrates and diluting them for our fluid therapy. At best this procedure left much to be desired. Transporting large volumes of sterile water, calculating correct dilution, time required to administer fluids and cost to the client limited its use.

No commercial product was available that was labeled for use without dilution. We did use some of these products undiluted, besides being extra label many had warnings to use only diluted, so initially these were used only on the most severe cases.

Recently a 7% hyper saline solution has been made available commercially that is labeled for undiluted use. This product is marketed in liter bottles.

Our success in treating dehydration in scouring new born calves with 7% saline was so rewarding it was only logical to use the product in adult cattle.

Initially the cases we used this product for were cows with severe dehydration or shock from severe blood loss. After observing the dramatic response in these cases, we started to use the product in other situations.

Today we routinely use hyper saline in any toxic cow, any dehydrated cow, cows that won't drink because of stray

voltage, and even cows that are overheated.

The researchers tell us that the benefits of large volumes of isotonic fluids are absent shortly after the cessation of delivery of the fluid but this is not present with hypertonic saline solution.

One observation we have made in our practice is that many toxic or dehydrated cattle will not drink. Without exception cattle treated with hyper saline will immediately drink. We always make sure water is available after treatment. It is not uncommon to have a calf drink over a gallon of water and a cow drink 5 to 10 gallons.

Our dosage is 180 ml of hyper saline for a 100 lb calf given simultaneously with a liter of Lactated Ringers with 5% Dextrose. We try to take at least 2 minutes to deliver this IV.

For the average adult Holstein cow, we give two liters as fast as it will run through a 14 gauge needle.

Two liters of hypertonic saline has the same amount of saline as 6½ gallon of Lactated Ringers!

In our practice hypertonic saline has provided us an opportunity to provide the fluid therapy in many animals that time or economics would not have let us do in the past. With simultaneous use of nonsteroidal anti-inflammatory drugs we have been successful in treating many toxic cattle without using antibiotics.

High Heels for Holsteins or . . . THE THRILL OF VICTORY OVER THE AGONY OF DE FEET

Reilly Glore, DVM
Brady Veterinary Hospital
450-15 Monte-Brady Road
Montesano, WA 98563

The trend towards larger dairy herds which are confined on concrete surfaces for most of the cow's lactation

has insured that bovine lameness treatment continues to be a significant part of most veterinarians' routine. A com-