HYPERSALINE SOLUTION

Dehydrated adult cattle are administered 2 L of hypertonic saline (approximately 2400 mOsm/L; 8 times normal tonicity) into the jugular vein over 4 to 10 minutes. This will require a 12 g needle or long extension set to obtain an adequate flow rate. Have fresh water available for the animal to drink. If the cow doesn't drink within 5 minutes of hypertonic saline administration, tube cow with at least 5 gallons of water or hypotonic sodium containing electrolyte solutions. Hypertonic saline injection is a one-time deal, it should not be repeated or hypernatremia may result. Hypertonic saline (7.2%) NaCl) should not be administered faster than 1 ml/kg/min; if administered at too fast a rate there is hemodynamic collapse due to vasodilation and decreased cardiac contractility. If hypertonic saline is administered at too slow a rate then the osmotically driven free water shift does not occur and we might as well administer an isotonic crystalloid solution.

SOURCE: http://veterinarycalendar.dvm360.com/critical-care-sick-cattle-practical-iv-therapy-proceedings?rel=canonical