When one of your cows or bulls develops a foot problem what is your preferred treatment plan? Do you wait a few weeks, maybe months, to see if it will heal itself? Or, do you give an antibiotic injection and turn the animal back out into the pasture in hopes that they will get better in a week or so? This week we will discuss a different treatment method known as Regional Intravenous Perfusion, or RIP.

Regional Intravenous Perfusion is often used to treat foot infections because it achieves a very high concentration of antibiotics in the affected tissues. This is done by placing a tourniquet above the affected area. A long acting antibiotic that can be administered intravenously is then administered in the animal's leg. The tourniquet is left on for twenty minutes to allow ample time for the antibiotic to be absorbed into the affected area. Then, the tourniquet is removed and bandages may or may not be applied. Repeating of this process may be necessary before complete healing takes place.

There are many reasons why this is the preferred route of treatment in foot and lower leg infections. RIP is more productive than other more common treatments because it provides quicker results. The quicker the animal is treated results in less time wasted in between injections waiting to see if the animal will improve, as observed in other treatment methods. Treatment by RIP is also convenient as the withholding time is often much shorter with this treatment method than if the antibiotic was given intramuscularly or subcutaneously. Additionally, injections given subcutaneously or intramuscularly provide a much lower concentration of antibiotics in the affected tissue compared to the concentration that is present after RIP. It is this concentration that directly affects the antibiotic's ability to eliminate infection from the animal.

Although RIP is a beneficial method of treatment in cattle with feet and lower leg infections, it is not the best route to take in treating *all* feet and leg issues. Cattle with fractured bones, arthritic formation, and other serious feet and leg issues should be treated in a different manner. If you have cattle with issues such as these, or if you would like more information regarding the RIP procedure, please contact us.

Thanks, Dr. Jesse Richardson, DVM

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