PINKEYE TREATMENT

Two professors at UC Davis' School of Veterinary Medicine, Dr. John Angelos and Dr. Lisle George, have researched this topic for many years and this short summary contains many of the practical items they have discovered.

Remember, if you are going to examine the eye for a foxtail or other weed—use disposable latex exam gloves. After you have touched the eye (extracted the foxtail and/or treated the eye) throw the gloves away. They are badly contaminated with the pinkeye bacteria. If you used a halter or nose tongs to restrain the animal, disinfect this equipment and Nolvasan® is a good choice for disinfection. Use disposable needles and syringes.

The pinkeye agent is a bacterium and therefore, antibiotics are indicated for treatment. The question has been, "Which antibiotic, what dose, what route?" The best treatments proven by research in beef cattle are listed below:

1. Long-acting tetracycline (Biomycin® 200 or LA-200®)

Dose: 4.5 ml/cwt (hundred pounds of body weight)

Route: intramuscularly or subcutaneous (these products are irritating to tissues and should be given sub-Q whenever possible) both are labeled for sub-Q use. **Frequency:** Two injections 48 to 72 hours apart.

Label: Both products are labeled for pinkeye and you will not need your veterinarian's prescription if you follow the label instructions.

2. NuFlor® (florfenicol)

Dose: 3 ml/cwt **Route:** Intramuscularly **Frequency:** two injections 24 hours apart

Alternatively, NuFlor® can be used as single injection for longer action.

Dose: 6 ml/cwt Route: Subcutaneous Frequency: one treatment Label: NuFlor® is not currently labeled for pinkeye and you must have your veterinarian's prescription to use this drug for pinkeye in cattle.

3. Excede[®] (ceftiofur)

Dose: 1.5 ml/cwt

Route: Subcutaneous--on the back of the ear or at the base of the ear as per instructions on the label. You will need to get your veterinarian to train you in the proper administration of this drug. It is relatively easy; however, if given incorrectly the drug will kill the animal very rapidly.

Frequency: one injection provides therapy for 7-8 days.

Label: Excede R is not currently labeled for pinkeye and you must have your veterinarian's prescription to use this drug for pinkeye in cattle.

4. Draxxin® (tulathromycin)

Dose: 1.1 ml/cwt **Route:** Subcutaneous in the neck region. **Frequency:** One injection. **Label:** Recently approved for pinkeye, your veterinarian's prescription is required.

The above treatments are very effective and should be considered the best methods currently available for the treatment of pinkeye in cattle. None of the above methods require any injections into the eye. Continued use of tetracyclines in areas with high numbers of anaplasmosis cases may make the cattle susceptible to sickness due to anaplasmosis. Consult with your veterinarian regarding this potential problem. **NOTE: if any antibiotic product is not labeled for pinkeye, you must obtain a prescription from your veterinarian, as this constitutes an extra label use of this product.**

Another treatment option is to give penicillin as an injection under the white part of the eyeball (the sclera). If you are not expert in this method, have your veterinarian train you on the proper way to administer this treatment. Do not attempt this method without training. To achieve good results, give 1 ml (1 cc) under the sclera of both eyes for at least 3 days. This method can achieve good results, but is more difficult and potentially more dangerous to the animal than giving an intramuscular or subcutaneous dose of oxytetracycline, NuFlor®, Draxxin®, or Excede®. Again, you will need your veterinarian's prescription for the use of penicillin as it is not labeled for use in pinkeye.

For many years Furox sprays or powders (Nitrofurazone, Furox®, Topazone®, NFZ Puffer, P.E. 7, etc.) placed into the eye were used for the treatment of pinkeye. This method was not as effective as the above methods. However, beginning in 2002 this treatment became illegal for cattle. This is irrespective of whether or not you have a prescription or if a drug supply company sold you a furacin containing product. **Do not use the furacin-type drugs in cattle any more.**

There are some liquids and spray-type products still available for pinkeye treatment. These products only stay in the eye for about 7 minutes before the tears wash it out and therefore, are much less effective than any of the methods described above. As with all treatments that are placed directly into the eye, proper restraint is necessary and the use of disposable latex gloves is recommended.

For many years, treatment with dexamethasone (Azium®) has been popular. Research indicates that when this is given under the sclera, there is no difference in the rate of healing. Therefore, use of this product is not usually recommended.

Keep written records of treatments and results. Discuss these with your veterinarian as you reevaluate pinkeye prevention and treatment plans for the future. Also, if your cattle are copper deficient or selenium deficient, the number of pinkeye cases will be greater and the severity will be worse. Be sure your mineral program is working, as this is important in the animal's immune response to this bacterial pathogen.

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