

Suturing the Nictitating Membrane for Treatment of Pinkeye in the Bovine

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Keratoconjunctivitis, commonly called pinkeye, has been a recognized condition in cattle for many years. Over the years, treatment methods have varied. Some were successful, others failed.

The old-timers talked about pinkeye vaccine which has only become a reality recently; and we wonder about their efficiency.

The spread of eye pathology from cow to cow has no doubt been a bigger problem with the advent of the facefly.

Signs of pinkeye vary considerably from case to case. We may see excessive lacrimation, *Keratitis sica*, blepharospasm, photo phobia, reddened conjunctiva, cloudy cornea, corneal ulcers and head tilting from the intense pain. There may be increased interocular pressure and a protruding eyeball.

We, like everyone else, have used a variety of treatments. Antibiotic powders and ointments are helpful, but they tend to wash out of the eye and we do not get them applied three or four times daily as needed.

Injection of foreign protein may be of some value to stimulate the RE system. Eye patches keep the eye in the dark, keep out the dust and cover up the eye for seven to ten days so the owner does not worry so much. They are beneficial but often the eyeball needs a more physiological protection.

We have had our most satisfactory results by injecting an antibiotic under the palpebral conjunctiva and suturing the nictitating membrane to the lateral canthus.

The equipment required is very simple. The preferred antibiotic, #3 or #4 chromic catgut, a suture needle and needle holder will be sufficient. A firm

means of head restraint such as a squeeze chute is preferable but it is possible to do these with only a halter on the animal.

The first step is to inject the chosen antibiotic under the upper palpebral conjunctiva.

Step Two is to pass the suture material through the skin and conjunctiva out between the eyelids starting about 2 cm lateral and dorsal of the lateral canthus.

Step Three is to pass the suture material through the nictitating membrane parallel to the leading edge, about 0.5 cm away from the edge.

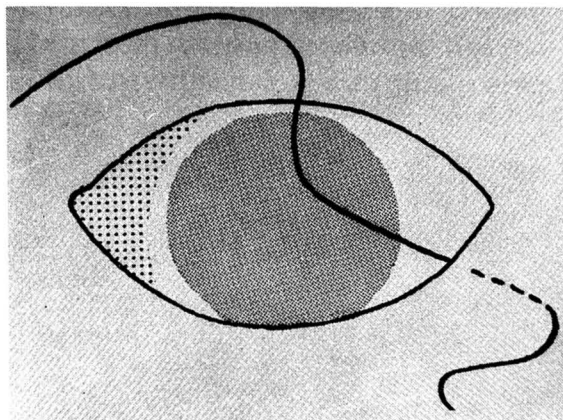
Step Four is to pass the suture material between the lids, out through the conjunctiva and skin, about 2 cm lateral and ventral to the lateral canthus.

Step Five is to place enough tension on the sutures to pull the nictitating membrane over the eyeball. Then tie the suture ends lateral to the lateral canthus.

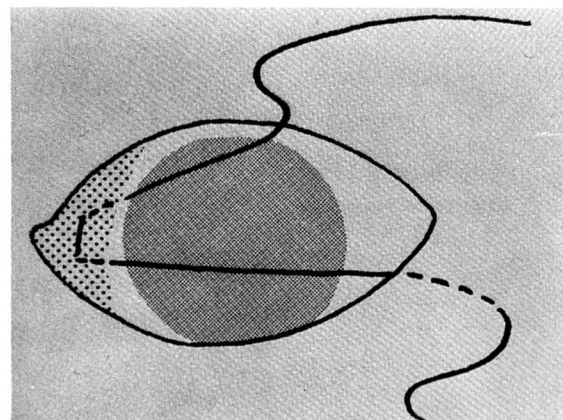
Severe cases where the cornea is all reddened and ulcerated will heal satisfactorily. If both eyes are diseased they can be sutured simultaneously. The patient should be confined to a small lot so he can find feed and water. These double-sutured patients can get around a stall fairly well.

Advantage of this method is that the injected antibiotics are not easily washed out with the tears. The cornea is covered with a moist tissue which also protects it from light and dust. The covered cornea helps the owner to discontinue worrying about the case until the stitch drops out in seven to ten days.

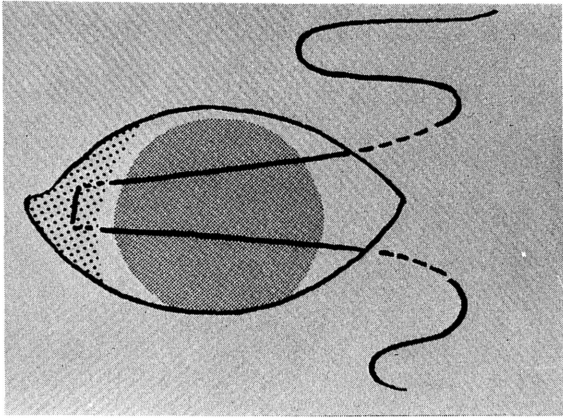
We have used this technique for ten or twelve years. This physiological bandage is our most consistently successful treatment for pinkeye in cattle.



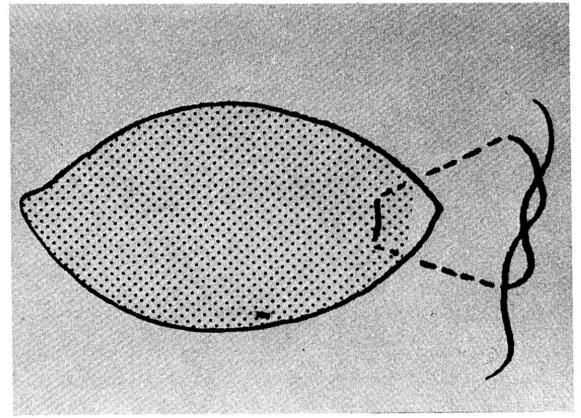
Step 2.



Step 3.



Step 4.



Step 5.