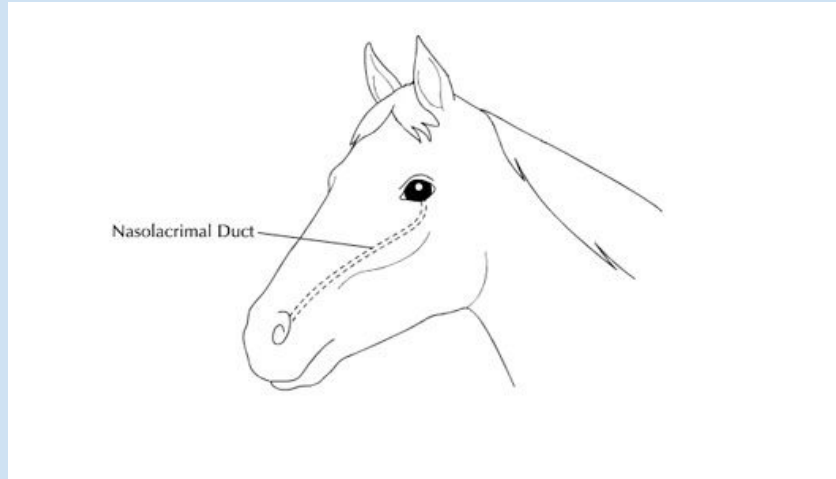


Eye Flush (Nasolacrimal Duct)

In small animals the nasolacrimal duct is flushed in a normograde fashion, from the eyes down to the nose. In most large animals, however, the nasolacrimal duct is flushed in a retrograde fashion, from the nose to the eye. This procedure is commonly done in equine practise.



Step 1:

Check the tear duct to ensure that it is not patent. This is done by applying fluorescein dye to the eye and observing flow to the nose. This may take approximately 15 to 20 minutes in a normal horse. If no flow is seen, this indicates an obstructed tear duct.

Various instruments can be used to flush the nasolacrimal duct. These include:

- tom cat catheters OR,
- 3.5 to 5 polypropylene canine urinary catheter OR,
- red rubber feeding tube (this is very flexible and is difficult to get past an obstruction).
- Additionally, a 20ml syringe with warm sterile saline is needed to perform the flush

Step 2:

In the horse, the nasolacrimal duct is located at the junction between stratified squamous epithelium and pseudostratified columnar epithelium of the mucous membrane of the nostril. Allow an assistant to restrain the patient's head while you stand to the side of it. Advance the tube of choice into the nasolacrimal duct.

Step 3:

Attach the syringe to the free end of the tube. With one hand, apply pressure with your finger over the duct opening and catheter. With the other hand, slowly administer the saline solution. This should be done with care to avoid rupturing the sensitive nasolacrimal duct. Saline should be seen flowing through the eyes.



To be noted: If blood is seen coming out of the duct after the catheter is removed, advance the catheter all the way to the eye and leave it in place for approximately 7 to 10 days to allow the duct to heal properly.

If flushing in a retrograde fashion is unsuccessful, a normograde fashion should be attempted.

- Locate the nasolacrimal ducts on the eye which is located near the mucocutaneous junction, 3 - 5 mm from the medial canthus. There is a dorsal and ventral puncta. The dorsal puncta is usually preferred as its conformation allows easier advancement of the catheter compared to the ventral puncta. In large animals, a 20 ga IV catheter can be used for this procedure.
- Advance the catheter through the dorsal puncta and hold it in place. Attach the syringe and apply gentle force to the plunger to flush the nasolacrimal duct with warm saline solution.

Eye FLush: <https://courses.cit.cornell.edu/vet644/eyeFlush.html>