



DACRYOCYSTITIS – Not just a weepy eye!

What is dacryocystitis?

A blockage, inflammation or infection of the nasolacrimal (tear) duct. The tear duct in the rabbit runs from the eye to the nose as in most species.

What do I see?

Signs may be present in one or both eyes. The increase in tears running down the face can cause crusting around the eye, and loss of hair in front of the eyes. This can often be severe with large areas of red and inflamed skin seen in front of the eye. A clear, milky or white discharge from the eyes can be seen and usually the eye remains open. In severe cases there can be inflammation of the eye as well and the cornea (surface of the eye) can also be damaged. In these cases the eye may appear closed and painful.



What causes dacryocystitis?

Some rabbit breeds such as Netherland dwarfs and mini-lop rabbits are more likely to have dacryocystitis due to breeding selection for a short nose. This causes the tear duct to be squashed and thus it does not run a straight path from the eye to nose as in long nose breeds. Other causes can be

- o Dental disease. Elongated tooth roots or tooth abscesses can squash the tear duct.
- o Incisor malocclusion (uneven growth of the incisor teeth).
- o Upper Respiratory disease or infections of the nose. Inflammation and infection caused by these conditions can block the tear duct
- o Past episodes of dacryocystitis and subsequent scarring and narrowing of duct
- o Systemic or concurrent illness. Mild dacryocystitis maybe the first presenting sign in a number of low grade infections.

What else could it be?

In some cases, viruses can cause swelling of the eyes which may be mistaken for dacryocystitis. These often appear suddenly over 24 hours. Abscesses affecting the tear ducts can also cause similar signs.





What can we do?

In most mild cases of dacryocystitis, flushing the tear duct and using some antibiotics and anti-inflammatories over the next few days will help dramatically. However in many cases tear duct problems will reoccur as there is usually an underlying problem. Some rabbits require treatment a number of times each year.

What is a tear duct flush?

A small amount of local anaesthetic is placed into your rabbit's eye. A small catheter is then placed into the tear duct and saline is flushed through until the duct blockage is cleared.

In most cases this procedure is well tolerated by the rabbit and can be performed without sedation. In some severe cases, sedation is ideal as larger amounts of flush can be used ensuring a better response without distress caused.

What if the tear duct does not flush?

In some cases the tear duct is completely blocked and in these cases it is even more important to find the underlying cause.

Can we look for the underlying problem?

Investigating and finding the underlying cause of the dacryocystitis is highly recommended as it gives a better change of being able to correctly treat the problem and also give an indication of the long term prognosis. Some of the testing we commonly perform is:

- o Dental radiographs (x-rays). Under a short anaesthetic a number of different x-ray views are taken of the head to check the tooth roots, a major cause of tear duct problems. We often also use contrast media to better highlight the duct.
- o CT scan – are often the best way to investigate for underlying causes
- o A swab of the discharge can be sent to the laboratory to grow the bacteria involved and to ensure we choose an antibiotic that will be effective.

Ongoing treatment:

If no underlying cause is found then repeat tear duct flushing is sometimes needed along with ongoing anti-inflammatory and antibiotic use to reduce any pain and swelling around the eye. In persistent or severe cases, repeat tear duct flushing twice a day for 5 - 7 days may be necessary.

If you are at all concerned about your rabbit, or have any further questions, please don't hesitate to get in touch with us.

