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### Runny Eyes (Epiphora)

(Excessive tear production in dogs and cats)



Watery ocular discharge is a common concern of pet owners. Excessive tears drain down the pet's face and, in time, the chronic exposure to moisture produces skin irritation, infection, and odor. The fur becomes stained reddish brown due to tear pigments called porphyrins, an especially non-cosmetic problem in white-furred pets. The medical term for this condition is epiphora and it is one of the most difficult conditions to resolve in all of veterinary ophthalmology.

**There are two causes of epiphora (excess tearing) in pets: irritation to the eye and abnormal tear drainage.**

#### Irritation to the Eye

One of the eye's natural responses to irritation is to produce more tears. This helps flush away any irritants that might have contaminated the eye surface. If excessive tearing is accompanied by squinting or pawing of the eye, or if the excessive tearing should occur suddenly, this should be taken as an obvious sign of eye pain and veterinary attention should be sought at once. Any accompanying loss of vision should be taken as an emergency.

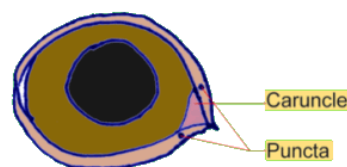
It is the more chronic cases that are harder to manage. Eyes can certainly become chronically irritated from viral conjunctivitis (probably the most common reason for excessive tearing in cats), from glaucoma (painful increase in eye pressure in the eye), from reaction to certain eye medications, or more commonly from eyelid or eyelash abnormalities.

Some breeds of dogs naturally have hair in their eyes and this does not cause irritation, in most cases but in some cases it can. Hairs can grow from the face onto the eye and cause irritation. Eyelashes can grow at abnormal angles and rub on the eye. Eyelashes can even grow on the inner surface of the eyelids or corner of the eye and cause irritation. Often magnifying instruments are needed to discover these tiny hairs and delicate surgical procedures are needed to address them. Complicating the situation, however, is the fact that breeds that tend to have eyelid and eyelash problems also tend to be the same as those with faulty tear drainage anatomy (see below), which makes it hard to determine which of many possible causes is to blame.

Allergy, irritating dust or smog in the air, trauma, or infection can lead to excessive tears from conjunctivitis. These other problems can often be treated medically by a general practitioner.

- [Corneal ulcer](#)
- [Feline upper respiratory infection](#)
- [Inhalant allergy](#)
- [Brachycephalic breeds](#)
- [Dry eye](#)

#### Normal Tear Drainage



Once we are certain that the eye is not painful, we can consider that the drainage ducts of the eyes may not be normal. The normal eye is most efficient at draining tears. Look at the inner corner of the eyelids (the side nearest the nose) where you can see the pink, moist caruncle, and on the eyelid margins there are upper and lower openings called nasolacrimal puncta. These are essentially drainage holes for tears. The puncta are the openings to small passages called canaliculi which in turn open into a sac called the lacrimal sac. The lacrimal sac drains into the nasolacrimal duct, which drains tears into the nasal passages and throat. (This is why we get runny noses when we cry, why we sniffle when we cry, and why we can taste our tears when we cry).

There are many problems that can occur along this drainage route. One common problem, especially in poodles and Bichons frises as well as brachycephalic breeds, is simply that the eye socket is shallow. This means that tears overflow from the corner of the eye because the eyelid space there is not deep enough to contain them. These tears never make it to the puncta and instead spill down the sides of the nose. This condition, if present, cannot be repaired; it is simply the conformation of the dog's face.

Alternatively, the eyelids may be turned inward (a condition called entropion) blocking the puncta and preventing drainage. Another problem may be long hair acting as a wick that draws tears from the eye to the skin, especially in breeds where hairs actually grow on the caruncle. This hair may be kept trimmed; although if the hair is part of a brachycephalic breed's nasal skin fold, surgery may be needed to remove or alter the skin fold.

Old infections or injuries may scar the puncta, canaliculi, or nasolacrimal ducts closed. Sometimes a vigorous flushing of saline through the ducts, performed under general anesthesia, can re-open them. Sometimes the puncta are congenitally closed (common in poodles and cocker spaniels) and can be surgically re-opened.

It is fairly easy to determine if there is a problem with drainage in a non-invasive way that is sometimes called the Jones test.) A stain for eyes called fluorescein is dropped onto the eye and after a couple of minutes should be evident at the nostrils if the tear drainage system is intact.

If surgery is required in these delicate little drainage structures, special equipment is needed and a veterinary ophthalmologist is best consulted. For help finding an ophthalmologist for your pet, check [www.acvo.com](http://www.acvo.com).

#### Addressing the Staining

An assortment of remedies has been suggested to resolve the unsightly reddish stains that result from chronic tear drainage. The following are some comments on suggestions we have heard.

- *Low doses of tetracycline or tylosin:*  
Variable success has been reported but the problem is that this probably constitutes less than responsible use of antibiotics, and resistant bacterial strains may result from this practice. It is generally frowned upon by pharmacologists. It is probably worth mentioning that tetracycline should not be used in immature animals as it will cause the teeth to be stained.
- *Regular wiping of the area with hydrogen peroxide* basically serves to bleach the area and requires regular use to make a difference.
- *Missing Link® Nutritional Supplements:*  
The manufacturer lists reduction in tearing and tear staining as one of the benefits of the product although they say 3 to 4 months of use are needed to see a change. Because this is a nutritional product, they are not able to formally make this claim on the label and no experimental studies have been done to prove the validity of this claim.
- *Douxo Micellar Solution* is also reported to cleanse away staining debris from the hair with use over time. This product is used on the fur and skin, NOT ON THE EYE.

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