

OPTIXCARE® EYE HEALTH BENEFICIALLY CONTROLS THE FORMATION OF TEAR STAINS IN DOGS

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What are tear stains?

Tear staining refers to the dark stains below the inner corner of the eye of dogs that result from and overflow of excessive tearing (epiphora). In dogs fluid secreted from the lacrimal glands and glands from the third eyelid are believed to contain porphyrin which are naturally occurring molecules containing iron that are formed as waste products from the breakdown of red blood cells. Upon exposure to sunlight, these molecules in the tears become reddish-brown in color due to oxidation. Tear staining is much more prevalent in certain breeds and is more obvious in animals with light-colored coats. Brachycephalic breeds are prone to epiphora due to their shallow

eye sockets as well as skin folds which can affect periocular hair growth. Although tear staining is a cosmetic problem, its presence can also be a symptom of serious ocular health issues such as trichiasis, conjunctivitis, the presence of unusually small nasolacrimal ducts, entropion, otitis, or brachycephalic syndrome. Staining from excessive tearing can also result from certain medications, exposure to irritants such as second-hand smoke, stress and diets. Veterinary ophthalmologists diagnose the cause of epiphora by visual presentation in predisposed breeds. In non-predisposed breeds, the cause must be evaluated by routine ocular procedures.

Can tear stains be removed?

The level of tear stains can be controlled by keeping the face meticulously clean and free of porphyrin-containing tears. Generally, this means gently wiping the face at least twice a day with a soft, warm, damp cloth and keeping facial hair trimmed. Prescription antibiotics such as tylosin or tetracycline can reduce the significance of tear stains; however, the ongoing use of these antibiotics to control tear staining can lead to the development of drug resistant bacteria which can be far more dangerous for companion animals. Long-term use of antibiotics can also adversely affect the liver and kidney. In young dogs, tetracycline can permanently

FIGURE 1. TEAR STAIN REDUCTION AND IMPROVEMENT OF APPEARANCE OF DOGS RECEIVING TOPICAL OPTIXCARE® EYE HEALTH FOR 2 MONTHS. TWICE A DAY (B.I.D.) APPLICATION WAS MORE BENEFICIAL THAN ONCE A DAY (S.I.D.) APPLICATION.



TOBIN B.
MISSION VIEJO, CA
INITIAL



TOBIN B.
MISSION VIEJO, CA
2 MONTHS S.I.D.



BELLA P.
OMAHA, NE
INITIAL



BELLA P.
OMAHA, NE
2 MONTHS
B.I.D.

stain teeth yellow, while tylosin can lead to GI problems, such as persistent diarrhea. Although tylosin is not approved by the FDA for use in dogs, several OTC tear stain products contain this potentially harmful antibiotic. Recognizing the potential danger of tylosin in pet stain whitening products, the FDA in August 2014 issued a warning letter to several manufacturers of these illegal antibiotic containing products to have them removed from the marketplace. Whitening products containing hydrogen peroxide or weak acids are also available for reducing porphyrin staining on fur. These products are not ideal because they only remove but cannot prevent future development of tear stains. Moreover, direct contact with these agents can actually harm the eyes.

Optixcare® Eye Health – A new and natural way of treating tear stains

Optixcare® Eye Health is a natural antioxidant topical formulation that has been specifically designed to support ocular health in aging companion animals. In laboratory studies this formulation has been shown to reduce oxidative stress associated with cataract formation, retinal degenerations, as well as maintaining tear flow in keratoconjunctivitis sicca;

a multifactorial disease of the ocular surface that is linked to inflammation associated oxidative stress. As a result, a clinical study has been conducted to determine whether Optixcare® Eye Health is beneficial for controlling tear stains. In 2017, a simple, prospective, multicenter before and after observational study on the effect of Optixcare® Eye Health in eliminating tear stains was initiated at 4 centers for 134 days with Tyler Armstrong, RVT, as Study Coordinator. In addition, observational data from Therapeutic Vision, Inc., the developer of the Eye Health formulation, was also obtained. Results from a total of 25 dogs indicate that Optixcare® Eye Health, when administered twice daily (b.i.d.) to each eye, can eliminate the development of tear staining. According to Dr. Coward, Mission Viejo Animal and Bird Clinic, when Optixcare® was administered only once daily (s.i.d.) a 15-20% improvement was still observed and he will continue to prescribe the eye gel. Its affect, illustrated in Figure 1, shows the dramatic improvements that can result from its administration. During this study, no adverse events were reported, highlighting the safety of this product. Administration of Optixcare® Eye Health only prevents the oxidation of porphyrins in tears and cannot

remove pre-existing porphyrin staining present in the facial hair of dogs. Therefore, in order to see the dramatic effects of Optixcare® Eye Health, owners should have their pets groomed to remove pre-existing porphyrin staining shortly after application has been initiated. To ensure ease of application of Optixcare® Eye Health and to reduce frustration, owners should be instructed on how to properly apply the eye gel. Instructional videos on applying Optixcare® are available on YouTube at <https://tinyurl.com/y7aerggd>.

Early results indicate that Optixcare® Eye Health has been shown to effectively control tear staining in select dogs. However, its effectiveness depends on pet owner compliance which requires twice daily application to both eyes for a minimum of 8 weeks. Optixcare® Eye Health is not a bleach and cannot remove staining impregnated into the fur. Therefore, owners should groom their pets by carefully clipping hair with pre-existing porphyrin staining shortly after Optixcare® Eye Health application has been initiated. In addition, daily hygiene around the eye with cleaning agents such as Optixcare® Eye Cleaner and/or Optixcare® Eye Cleaning solution is recommended.



FRANKIE R.
COUNTRYSIDE, IL
INITIAL



FRANKIE R.
COUNTRYSIDE, IL
2 MONTHS
B.I.D.



BELLA R.
SAN DIEGO, CA
INITIAL



BELLA R.
SAN DIEGO, CA
2 MONTHS
B.I.D.