



By your veterinary ophthalmologist

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## Pigmentary keratitis

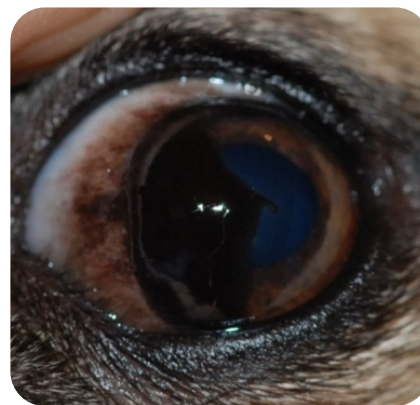
### What pigmentary keratitis?

Pigmentary keratitis is the response of the cornea to chronic irritation and/or inflammation in which pigment or melanin is deposited in the corneal epithelium (surface of the eye).

There are many factors that make this a breed problem in the Pug and other brachycephalic (short-nosed) breeds. Anatomically, Pugs have shortened muzzles which often make for excessive nasal fold skin and shallow eye sockets which cause the eyes to protrude. Protruding eyes give rise to a condition known as lagophthalmia - the inability of the eyelids to fully cover and protect the cornea and distribute the tear film effectively.



Case of pigmentary keratitis due to protrusion of the globes (lagophthalmia).



Case of pigmentary keratitis due to the nasal folds rubbing against the cornea.

This condition is also one of the long term complications of eyes replaced following proptosis (traumatic displacement) and dry eye (keratoconjunctivitis (KCS)). Other

irritating factors include facial hair directed toward the eye (trichiasis), misdirected eyelashes (distichiasis), as well as acute trauma to the eye.

The deposition of pigment into the cornea can be permanent if the irritating problem is not resolved - excessively long nasal folds shortened, misdirected removed, KCS treated, etc. Once the primary problems have been resolved, superficial pigment deposits can often be minimized with topical eye medications (artificial tears, cyclosporine eye drops etc..). If the pigment proves to be deep within the cornea, it is often permanent.



Case of pigmentary keratitis due to dry eye (KCS)



Case of pigmentary keratitis due distichiasis