

Napoleon's Corneal Ulcer

By Dr. Andrew D. Lenton

Napoleon is a male French Bulldog that was brought in to Route 516 Animal Hospital at 9 weeks of age. His owner had recently adopted him and noticed that his eyes were red and there was a cloudy area on the surface of his right eye.

On his physical exam, Napoleon was holding both of his eyes partially closed and on closer inspection, his conjunctiva (the membranes that cover the front of the eye and line the inside of the eyelids) were inflamed and a thick, green discharge was present.

In cases like this, it is important to rule out damage to the cornea (the transparent outer surface of the eye) as this will guide management of the problem. To see if there is any damage or defect to the cornea, a drop of a special dye that glows under UV light is applied to the eyes, and then the eyes are flushed with a sterile solution. If there is a corneal defect, or ulcer, then the dye will be taken up in that area.



As you can see, Napoleon did have a corneal ulcer present in his right eye, although thankfully no stain was taken up in his left eye. Corneal ulcers sometimes occur secondary to other problems such as 'dry eye' where there is insufficient tear production, or abnormal conformation of the eyelids that cause their eyelashes to irritate the cornea.

In Napoleon's case, it was most likely direct trauma to the cornea due to him rubbing his face as both eyes were inflamed and painful. His conjunctivitis was responsive to a topical antibiotic medication so was likely a bacterial infection.

The main aspects of managing corneal ulcers are correcting any underlying cause, preventing and controlling infection and then allowing the body to heal the defect itself.



At his recheck appointment, his eye had started to heal – blood vessels can be seen coming from the outer parts of his eye to help heal the defect and inflammatory tissue was present in the defect. Sometimes, ulcers do not heal and further procedures are required such as debriding the cornea, which is removing dead, excess tissue which helps stimulate healing.

Thankfully, Napoleon's ulcer healed well with the topical antibiotic medication alone and he was able to then concentrate on being an adorable puppy!!