



Spontaneous Chronic Corneal Epithelial Defects in Dogs

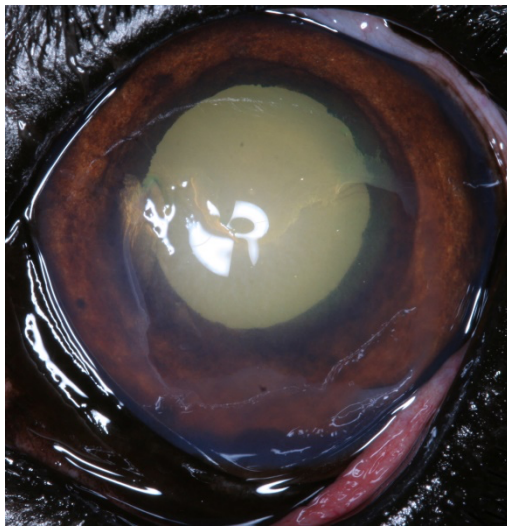
Spontaneous Chronic Corneal Epithelial Defect (SCCED) (or indolent ulcer) is a condition in which the surface layer of the cornea develops a defect that does not heal, leading to a persistent, non-healing **superficial ulcer**. These defects affect the outermost layer of the cornea, the epithelium, and causes discomfort over a prolonged period for your dog.

What Causes SCCED?

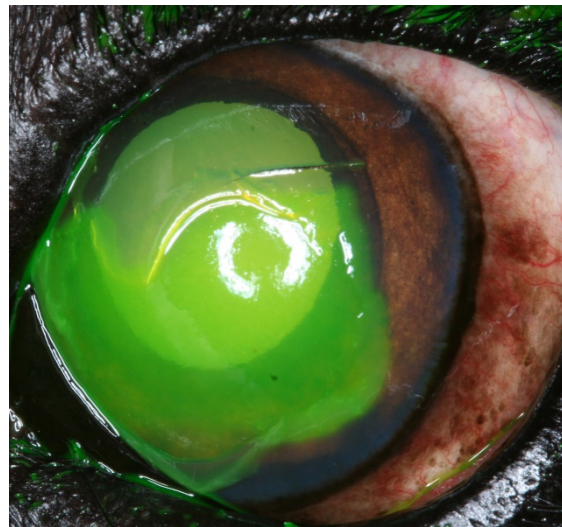
The exact cause of SCCED is not clear, but it is related to abnormalities in the attachment of the corneal epithelial cells. In healthy eyes, the epithelial cells adhere firmly to the underlying corneal tissue (the stroma), but in dogs with SCCED, the epithelial cells fail to adhere properly. This can lead to the formation of a painful superficial ulcer that does not heal as expected. Certain breeds are predisposed e.g. Boxers, but it can occur in any breed.

Diagnosis

SCCED is diagnosed by the characteristic appearance using a green stain called fluorescein dye.



Before fluorescein staining



After fluorescein staining





Treatment Options for SCCED

SCCED can be difficult to treat because the defect in the cornea tends to resist healing. However, with appropriate care, the vast majority of dogs can recover with minimal complications.

Medical Treatment (provides support but usually doesn't heal the ulcer used alone):

- Topical antibiotics: To prevent infection of the corneal ulcer which is a wound.
- Pain relief: Medications, such as topical or oral non-steroidal anti-inflammatory drugs (NSAIDs), may be prescribed to reduce discomfort in some cases.
- Artificial tears or lubricants: To keep the eye moist, more comfortable and help promote healing.

Surgical Treatment (needed to heal the SCCED):

- Debridement: The outer loose epithelium is removed using an instrument called a **diamond burr**. This is done under local anaesthesia with or without sedation, and aims to promote healing by encouraging healthy cells to grow back and stick down. Success rates are approximately 80 % so some need to be repeated approximately two weeks later.
- Surgical superficial keratectomy: In some cases, surgical removal of the outer abnormal cornea is best to more promptly resolve the problem.
- Contact lenses: Contact lenses may be applied to protect the cornea after debridement, to reduce pain and encourage healing. These may fall out themselves which doesn't really matter, they are to assist healing but the debridement will encourage the full healing.

Home Care:

- Follow all treatment instructions carefully, including the application of eye drops or ointments.
- Usually an Elizabethan collar (cone) is not needed but may be used for individuals.
- Monitor your dog closely for any worsening symptoms, such as increased squinting, yellow or green eye discharge, or abnormal contour of the cornea.
- Often the cornea becomes red and sometimes a little white during the normal healing process.

Prognosis

With appropriate treatment, the prognosis for SCCED is generally good – 80 % healed within 2 weeks of a diamond burr debridement and 95-100% healed within 2 weeks after surgical keratectomy. Eyes that don't heal after the first treatment may require a further procedure.

Monitoring and Follow-Up

It is essential to follow up with your own vet or with us to ensure the defect is healing correctly. Your veterinarian may recommend periodic rechecks to monitor progress, and will refer you back if problems. If you have any concerns about your dog's eye health, contact your vet or us for advice.

