



SPONTANEOUS CHRONIC CORNEAL **EPITHELIAL DEFECT** (SCCED)

What is a SCCED?

Ulceration of the cornea is the erosion of normal tissue most commonly caused by a traumatic injury.

A SCCED is a superficial corneal ulcer that fails to resolve through normal wound healing due to corneal abnormalities. A SCCED only involves the outer epithelial layer of the cornea whereas deep ulcers involve the stroma and in some cases the endothelium.

Signs of corneal ulceration

- + Increased blinking
- + Squinting
- + Ocular discharge/watery eyes
- + Rubbing of the eye
- + Discolouration to the surface of the eye

Treatment options

There are two main treatment options for your dog which will be discussed during the consultation. Factors to consider when choosing the treatment options are: your dogs' temperament; suitability for an anaesthetic; finances and your personal preference.

Diamond burr debridement: This is commonly carried out with just topical local anaesthesia during the consultation. A diamond Burr is used to remove the loose epithelial edges of the ulcer and to break through the abnormal underlying layer. This allows new epithelial cells to form and 'stick' to the stromal layer so the ulcer can heal. Most cases will heal after a single treatment, however ~15% of cases will require a repeat procedure after about 2 weeks.

Superficial keratectomy: This is a surgical procedure that is performed under a general anaesthetic. Using an operating microscope, the abnormal superficial layer of stroma is removed to allow the reformation of normal epithelial cells on top. This procedure is almost 100% successful however it is not always recommended as the first line of treatment because of the need for general anaesthesia (carrying its own risks), cost implications and increased likelihood of corneal scarring.

Aftercare

For all treatments, your dog will require eye drops and oral medication including antibiotics and pain relief. A buster collar must be worn to prevent self-trauma until the ulcer is healed. A recheck appointment should be made 10-14 days post treatment.

A contact lens may also be applied to the surface of the eye to improve comfort, but this may not be possible in every case.

When applying eye drops, ensure the applicator tip is kept clean and do not allow it to contact the surface of the eye.

Figure 1: Layers of the cornea

Complications

- + Failure to heal
- + Infection
- + Scarring







