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Mike has more than 35 years of experience in companion animal veterinary practice and is a valued member of IDEXX's Pet Health Network team since 2013.

The very term indolent (slow to heal) gives a hint to the behavior of these [lesions](#). They are extremely lazy!

Indolent corneal ulcers—also known as [Boxer](#) ulcers, recurrent epithelial erosions, or SCCED—are common in middle to older aged dogs of all breeds, but most commonly, as one might suspect, [Boxers](#). They are believed to be associated with a defect in the layers of the corneas to adhere properly¹. Generally there is no history of trauma and the majority of cases occur spontaneously.

Dog looking up

The signs of boxer keratitis include discharge, [squinting](#), [redness](#) and [excessive tearing](#). Additionally there may be a strange appearance to a normally clear cornea².

Diagnosis of eye ulcers

The presence of a corneal ulceration can be confirmed using a fluorescent dye that adheres to damaged tissues. It is important to thoroughly examine the eye for problems that may have played a role in the ulcer or delay healing. Indolent ulcers will generally have evidence that layers of the cornea are peeling or not sticking to each other. This will require a [veterinarian](#) to carefully examine the cornea.

Treatment of eye ulcers

Therapy can be very challenging because of the underlying abnormality of the corneal tissue that will delay normal healing. Effective treatments may require a variety of measures. A number of treatments have been used for these ulcers. Routine antibiotic and atropine treatments are often not effective. More aggressive treatment recommendations have included:

- Corneal debridement
- Chemical cautery to disrupt the corneal basement membrane and stimulate vascular ingrowth
- Hyperosmotic agents (e.g., 5% sodium chloride)
- Topical growth promoters (e.g., epidermal

growth factor, serum, etc.)

- Application of soft contact lenses or collagen shields
- Surgery including a third eyelid flap
- Punctate or grid keratotomy or superficial keratectomy

Corneal debridement is a frequently used treatment. One study indicated that canine refractory ulcers will heal about 40% of the time after this procedure alone³. However even more aggressive treatment may be needed in Boxer keratitis. Treatment may require contact lenses or collagen patch bandages to protect the cornea.

Prognosis of eye ulcers

Because affected dogs are often affected by an underlying defect of the cornea, recurrence is a possibility. While there is no proven genetic basis, breed predilections suggest that there may be genetic influences. It is likely that there is a genetic predisposition to this defect in Boxers. Studies are being conducted to look at the condition and identify genetic markers.

If you have any questions or concerns, you should always visit or call your veterinarian -- they are your best resource to ensure the health and well-being of your pets.

[1. Peiffer, Robert L., DVM, PhD, and Martha Low, DVM. "Canine Indolent Ulcers." CARES. Web.](#)

[2. "Ophthalmology - Indolent Ulcer." NC Stat University -- College of Veterinary Medicine. Web.](#)

[3. "Erosions and Superficial Corneal Ulcers." Hungarovet . Web.](#)