DÔMES PHARMA

MANAGING
CORNEAL ULCERS IN CATS

A PRACTICAL GUIDE FOR VETS



DID YOU KNOW?

When it comes to corneal ulcers, cats are not just small dogs.

Although ulcerative keratitis is a common presentation in general practice, feline patients have their own unique aetiologies, diagnostic considerations and treatment requirements.

Understanding how cats differ from other species is key to successful management.

To burr or not to burr?

Diamond-burr and grid or punctate keratotomies are contraindicated in cats and should avoided.

Unlike dogs, cats do not get SCCEDs.

Persistent or non-healing ulcers in cats should prompt a closer look for an underlying cause.

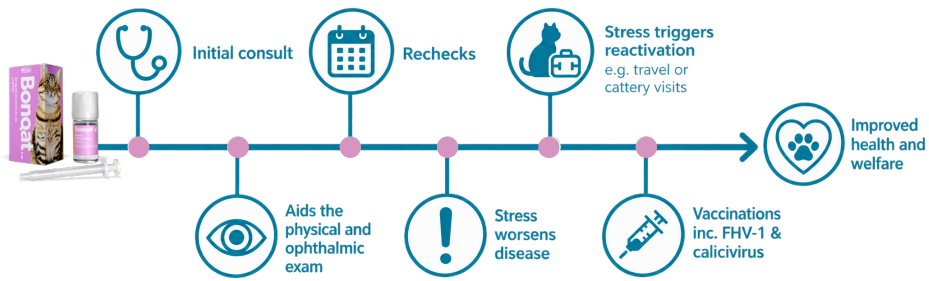
Assume FHV-1 until proven otherwise.

FHV-1 affects up to 97% of cats making it one of the most important causes of feline ulcers.[1]

STRESS MATTERS

It exacerbates FHV-1, makes the ocular exam challenging and discourages owners from seeking veterinary care.

Bonqat®, the licensed feline anxiolytic, can help at every step of the ophthalmology journey.



CORNEAL ULCERS

Corneal ulcers are defined as defects in the corneal epithelium with exposure of the stroma or basement membrane.

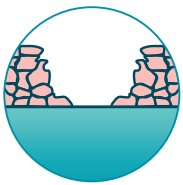
Common causes of corneal ulcers in cats include:

- **Trauma e.g. scratches or foreign bodies**
- **Eyelid or eyelash abnormalities e.g. entropion, trichiasis**
- **Feline herpesvirus (FHV-1) infection**
- **Facial nerve paralysis/trauma**
- **Corneal sequestrum**
- **Dry eye or tear film deficiencies**
- **Brachycephalic conformation e.g. exposure keratitis**

SIMPLE VS COMPLICATED ULCERS

Successful management relies on distinguishing simple from complicated ulcers, and identifying when underlying causes require additional treatment.

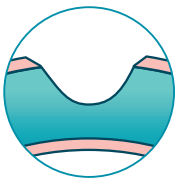
Ulcers are classified as 'simple' or 'complicated' based on their depth and healing time.



SIMPLE ULCER

Definition: An epithelial ulcer that heals within 5-7 days[2].

Management is typically medical and is aimed at supporting epithelial healing and preventing complications.



COMPLICATED ULCER

Definition: Any ulcer that extends beyond the epithelial layer, and/or fails to heal within 7 days.

Often progress from simple ulcers. As such management will need to be adapted.

CORNEAL ULCERS IN CATS: A QUICK REFERENCE GUIDE



FULL OPHTHALMIC & PHYSICAL EXAMINATION

inc: STT, TFBUT, fluorescein staining

SIMPLE ULCER DIAGNOSED:

- Topical, broad-spectrum antibiotic e.g. chloramphenicol*
- **Remend® 0.75 Corneal Gel** to support epithelial healing
- Analgesia e.g. systemic NSAIDs
- Prevention of self-trauma

HEALED

COMPLICATED

NON-HEALING SUPERFICIAL ULCER

(not healed within 5-7 days)

RE-ASSESS FOR AN UNDERLYING CAUSE:

e.g. entropion, tear film deficiencies (see 'common causes')

CONSIDER FHV-1 & ADDITION OF ANTI-VIRAL THERAPY:

Options include oral famciclovir*, or topical ganciclovir* or cidofovir*.

PROGRESSION TO STROMAL/MELTING ULCER

INTENSIVE MEDICAL THERAPY AND/OR SURGICAL STABILISATION:

- Topical antibiotic ideally based on cytology and/or C&S
- A topical anti-collagenase e.g. **Stromease®**
- Robust systemic analgesia
- Topical cycloplegic e.g. atropine*
- Prevention of self-trauma
- Re-assess for underlying cause

Indications for surgery/referral:
>50% stromal loss, descemetocele, perforation, worsening keratomalacia

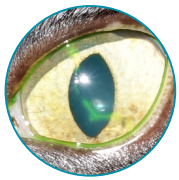


STT: Schirmer Tear Test, TFBUT: Tear Film Break Up Time, *not veterinary licensed within the UK.

FELINE HERPESVIRUS (FHV-1)

Following primary infection, FHV-1 establishes latency within the trigeminal ganglia and can recrudesce in response to stressors or corticosteroid use.

Dendritic ulcers are pathognomonic for FHV-1; which can coalesce into larger, persistent geographic ulcers.



DENDRITIC ULCER

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The addition of anti-virals is the mainstay of treatment for active infection.

Discontinuing corticosteroids and minimising stress are important, and management often requires balancing treatment needs with the potential stress it causes.

STROMAL & MELTING ULCERS

Stromal ulcers usually progress from simple ulcers due to increased collagenase activity resulting in destruction of the corneal stroma. Very rapid breakdown is known as keratomalacia or 'melting'.

Stromal and melting ulcers are ocular emergencies and intensive medical therapy and/or surgical stabilisation is indicated.

Treatment is aimed at arresting stromal loss and maintaining corneal integrity.

It can be difficult to predict which simple ulcers will progress to stromal involvement. While evidence in cats is limited, several clinical factors are recognised to increase the risk of ulcer progression.

Risk factors for ulcer progression: [1,3]

- Secondary bacterial infection e.g. *Pseudomonas* spp.
- FHV-1 infection
- Topical steroids
- Brachycephalic conformation
- Tear film deficiencies
- Recent GA/surgery
- Chemical injuries
- Systemic illness e.g. Diabetes

Treat ulcers intensively from day 1 in a patient with any of these risk factors.

MORE INFORMATION

Dômes Pharma provides a range of support materials and resources.

VET FOCUSED MATERIALS

- Corneal Ulcer webinar mini-series
- Digital Lab and Interactive Case
- Corneal ulcer guideline

PET OWNER MATERIALS

- Eye ulcers: what owners need to know
- 'How to' videos
- Social media & waiting room toolkits

Scan to visit domespharma.co.uk for more information.

SUPPORTING FELINE HEALTH



References: 1. Hartley, Claudia. "Aetiology of corneal ulcers: assume FHV-1 unless proven otherwise." (2010): 24-35.2. Maggs, D J. (2018). "Diseases of the Cornea and Sclera." In Slatter's Fundamentals of Veterinary Ophthalmology 6th Edition, by D J Maggs, et al, 213-253. St Louis, Missouri: Elsevier. 3. Tsvetanova, Agata, et al. "Melting corneal ulcers (keratomalacia) in dogs: a 5 year clinical and microbiological study (2014–2018)." Veterinary Ophthalmology 24.3 (2021): 265-278.

Stromease 25 mg/ml eye drops, solution for dogs and cats contains Acetylcysteine. Legal category POM-V. For the supportive treatment of corneal ulcers in dogs and cats. **Bonqat® 50 mg/ml oral solution for cats** contains Pregabalin. POM-V. For the alleviation of acute anxiety and fear associated with transportation and veterinary visits. Please refer to the product packaging and leaflets for information about side effects, precautions, warnings and contraindications.

Use medicines responsibly. www.noah.co.uk/responsible. Prescription decisions are for the person issuing the prescription alone.

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