DIAGNOSING ORAL ULCERATION IN DOGS & CATS

Jan Bellows, DVM, FAVD, DAVDC, DABVP
All Pets Dental
Weston, Florida

**DIAGNOSTIC/MANAGEMENT TREE**

**ORAL ULCERATION** *OBSERVED*

Acute (ie, abrupt onset, short duration [<3 weeks]) or chronic (ie, duration ≥3 weeks) presentation?

**ACUTE**

Obtain clinical history (eg, trauma, exposure to chemicals, radiation), and conduct physical and oral examination and diagnostic tests (eg, CBC, serum chemistry profile, cytology, histopathology)

Exogenous (ie, mechanical) or endogenous (ie, organic) cause?

**EXOGENOUS**

Conduct further diagnostic evaluation

**DIAGNOSIS**

Traumatic ulceration

- Thermal
- Electrical
- Chemical
- Mechanical

**TREATMENT**

- Removal of offending cause
- Medical therapy via direct injection (eg, triamcinolone) into lesion
- If ulcer is still present after treatment and removal of outside source, biopsy is indicated

**ENDOGENOUS**

Conduct further diagnostic evaluation (eg, viral testing [eg, calicivirus in cats], biopsy)

**DIAGNOSIS**

Stomatitis

- Areas of marked inflammation and ulceration, often located caudally in cats

**DIAGNOSIS**

Acute necrotizing ulcerative gingivitis (in dogs)

**TREATMENT**

- Supportive care
- Antibiotics to control secondary infections

**DIAGNOSIS**

Calicivirus (in cats)

**TREATMENT**

- Elimination of the primary/inciting cause
- Treatment as recommended

**DIAGNOSIS**

Erythema multiforme

**TREATMENT**

- Extraction of all teeth affected with stage 3 or 4 periodontal disease
- Strict daily plaque prevention at home

**CHRONIC**

See Chronic, next page

Conduct further diagnostic evaluation

**DIAGNOSIS**

Local irritation with plaque sensitivity (ie, contact mucositis with ulceration)

**TREATMENT**

See Chronic, next page

**DIAGNOSIS**

Stomatitis

- Areas of marked inflammation and ulceration, often located caudally in cats

**DIAGNOSIS**

Acute necrotizing ulcerative gingivitis (in dogs)

**TREATMENT**

- Supportive care
- Antibiotics to control secondary infections

**DIAGNOSIS**

Calicivirus (in cats)

**TREATMENT**

- Elimination of the primary/inciting cause
- Treatment as recommended

**DIAGNOSIS**

Erythema multiforme

**TREATMENT**

- Extraction of all teeth affected with stage 3 or 4 periodontal disease
- Strict daily plaque prevention at home

*Oral ulceration is a full thickness breach of the epithelial continuity of the oromucosal surface, which may extend into the tissues underlying the epithelium, including the submucosa, muscle, and/or periosteum.
Obtain clinical history (eg, trauma, exposure to chemicals, radiation), and conduct physical and oral examination and diagnostic tests (eg, CBC, serum chemistry profile, cytology, histopathology)

Exogenous (ie, mechanical) or endogenous (ie, organic) cause?

**EXOGENOUS**

Conduct further diagnostic evaluation

**DIAGNOSIS**

Persistent irritation from malpositioned teeth

**TREATMENT**

Elimination of tooth to mucosa contact through crown reduction and restoration or extraction

**DIAGNOSIS**

Local irritation with plaque sensitivity (ie, contact mucositis with ulceration)

**TREATMENT**

Dental scaling and polishing, followed by daily application of wax gel after daily plaque control

- If patient does not respond to treatment, administer pentoxifylline (dogs, 20 mg/kg PO q12h [extra-label]; cats, 100 mg PO Q12h [extra-label]) with doxycycline (5 mg/kg PO q12h) and niacinamide (dogs, 200-500 mg PO Q12h; cats, 125 mg PO Q12h)
- If patient remains unresponsive to treatment, perform full-mouth extractions

**DIAGNOSIS**

Stomatitis

- Areas of marked inflammation and ulceration, often located caudally in cats

**TREATMENT**

Extraction of multiple teeth, followed by daily plaque control at home

- Full-mouth extraction

**DIAGNOSIS**

Malignancy

- In cats, poor prognosis if noted sublingually

**TREATMENT**

Surgical excision, with ≥2 cm clean margins

- Daily home care (eg, daily tooth brushing, application of wipes to control plaque and calculus accumulation)

**ENDOGENOUS**

Conduct further diagnostic evaluation

**DIAGNOSIS**

Chronic

- Exogenous (ie, mechanical) or endogenous (ie, organic) cause?
DIAGNOSIS

Uremia
(due to marked azotemia)

TREATMENT
Treat underlying cause of uremia

DIAGNOSIS

Eosinophilic granuloma
- Located under the lips, hard palate, or soft palate in cats
- Commonly located in the caudal oral cavity in dogs
- Cats and certain dog breeds (ie, Cavalier King Charles spaniels, Norwegian breeds) predisposed

Perform biopsy

DIAGNOSIS

Pemphigus vulgaris
Bullous pemphigoid

TREATMENT
Immunosuppressive drugs (eg, prednisolone, azathioprine in dogs)

DIAGNOSIS

Uremia
(due to marked azotemia)

TREATMENT
Treat underlying cause of uremia

References

FIND MORE
For an image gallery of various presentations of oral ulceration, see Oral Ulceration, page 20.