PAEDIATRIC ACUTE CARE GUIDELINE	
Herpes Stomatitis	
Scope (Staff):	All Emergency Department Clinicians
Scope (Area):	Emergency Department

This document should be read in conjunction with this DISCLAIMER
http://kidshealthwa.com/about/disclaimer/

Herpes Stomatitis

Background

- Most primary infection by herpes simplex virus (HSV) type -1 in children is asymptomatic, or manifests as a mild upper respiratory infection.
- Approximately one quarter of primary infections manifest as gingivostomatitis, typically in the 1-5 year old age range, but can occur in older children.
- HSV is highly contagious, and is spread by direct contact with infected oral secretions and lesions.
- Following an incubation period of 2-12 days the child may develop gingivostomatitis, the severity of which ranges from mild discomfort to a debilitating illness requiring hospitalisation.
- Recovery usually occurs over 2 weeks.

Complications

- Dehydration – main complication secondary to refusal to eat or drink because of pain. If pain can be controlled early this complication can often be avoided. However, hospitalisation is sometimes unavoidable by the time the child presents.
- Herpetic whitlow or herpetic keratitis (dendritic ulcer) – from auto-inoculation
- Rare complications include herpes meningoencephalitis, and secondary bacterial infection of the lesions
- Dermatitides – eczema herpeticum or erythema multiforme which may be debilitating if severe
- Herpes infections in immuno-compromised patients can be very serious, and all cases should be discussed with a paediatrician.

Assessment

Clinical Features

Herpes stomatitis

- Children typically present with fever, bad breath, and refusal to drink due to painful oral lesions involving the buccal and gingival mucosa.
- Half to two-thirds of patients also have extra-oral skin lesions around the mouth. These painful lesions begin as typical herpetiform vesicles, which may progress to pustules or erode to become ulcers. Untreated, the lesions may last for 12 days.
- Fever (< 39°C) is common (especially if primary infection), and there may be enlarged cervical lymph nodes.

Diagnosis

- Diagnosis is clinical
- Though rarely needed, the diagnosis can be confirmed by viral scrapings, immunoflourescence of secretions or serology

Differential diagnosis

- Coxsackie virus infections (hand-foot and mouth disease, herpangina)
- Aphthous ulcers
- Oral candidiasis
- Stevens-Johnson syndrome

Management

Analgesia

- Should be offered to all children with herpetic gingivostomatitis because of the degree of pain most suffer
- Early provision of adequate analgesia may prevent dehydration and the need for hospitalisation
    - Oral / rectal paracetamol
    - Topical lignocaine gel (2% Xylocaine viscous) – Apply to affected area.
        - Children < 3 years: 4mg/kg (0.2mL/kg) – Maximum dose of 1.25 mL
            - No more than 4 doses per 24 hours. Not to be administered at intervals of < 3 hours.
        - Children > 3 years: 4mg/kg (0.2mL/kg) – Maximum dose of 5mL
            - No more than 4 doses per 24 hours. Not to be administered at

intervals of < 3 hours.

Aciclovir

- Aciclovir administered within 72 hours of the first oral lesions appearing has been shown to shorten the duration of oral lesions, pain, fever and eating/drinking difficulties, and is thus recommended for all children with herpes gingivostomatitis presenting within 72 hours of the first oral lesions:
    - Dose:
        - < 2 year olds: Oral Aciclovir 100mg/dose 5 times a day orally for 7 days
        - > 2 years olds: Oral Aciclovir 200 mg/dose 5 times a day for 7 days
    - If the patient is unable to swallow and requires IV Aciclovir refer to ED Guideline: Antibiotics
    - If the patient is immunocompromised please consult with their specialist as they usually need higher dose and longer treatment

- Patients who present after 72 hours of first oral lesion with ongoing development of new lesion/and or severe pain should still be offered anti-viral therapy (discuss with ED consultant)

- If in doubt discuss with ED consultants

Adjunct treatment

- Chlorhexidine mouthwash 0.2% – hold 10mL in mouth for 1 minute 2-3 times a day while ulcers are present
- If younger children are unable to do so, use chlorhexidine dental gel as substitute for toothpaste as an adjunct to oral hygiene.

Topical antiviral agents

- Topical antiviral agents are not helpful in the treatment of primary herpes gingivostomatitis in immunocompetent patients and are not recommended.

Antibiotics

- Antibiotics are not routinely used unless a secondary bacteria infection is diagnosed

Indication for admission

- Inability to maintain adequate hydration
- Immunocompromised host
- Eczema herpeticum
- Encephalitis, epiglotitis or pneumonitis (usually in immunocomprised patients)

Nursing

- Baseline observations: heart rate, respiratory rate, temperature, blood pressure and pain score
- Minimum of hourly observations should be recorded whilst in the Emergency Department
- Fluid input/output is to be monitored and documented

References

1. Keels MA and Clements DA (2014) Herpetic gingivostomatitis in young children. UpTo Date. Accessed at www.uptodate.com
2. WA Health Child and Adolescent Health Service. Ear, Nose, Throat and Dental ChAMP Empiric Guidelines. February 2014

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