Melbourne Sexual Health Centre

A service within The Alfred, a member of Bayside Health

CPG C4

CLINICAL MANAGEMENT OF UNCOMPLICATED GENITAL HERPES INFECTION

GUIDELINE STATUS: DRAFT: 14/05.2008
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SCOPE OF PRACTICE

TARGET POPULATION

- Clients presenting with anal and genital ulcers or symptoms consistent with genital herpes
- Clients who present as asymptomatic with subsequent discovery of symptoms during clinical examination

EXCLUSION CRITERIA

- Clients who are immunosupressed including HIV positive clients
- Clients with disseminated infection
- Clients with complications such as urinary retention and or severe pain
- Clients presenting with persistent symptoms post treatment
- Clients who are pregnant or breast feeding

GUIDELINE OBJECTIVES AND ANTICIPATED OUTCOMES

- Determine cause of symptoms and identify probable aetiology, probable diagnosis and differential diagnoses
- Provide treatment for clients with a confirmed diagnosed infection or presumptive treatment for symptomatic clients
- Identification of individual STI risk and provision of appropriate screening
- Identify public health risks to control infections by:
  - Provision of STI education and information
  - Identification and exploration of sexual risk taking behaviours
  - Partner notification and treatment
  - Test of reinfection/test of cure where appropriate
  - Monitoring antimicrobial resistance

BACKGROUND

CONDITION DESCRIPTION

Herpes simplex virus (HSV) is the most common cause of genital ulceration seen in clinical practice. [3] Genital Herpes is an extremely common sexual transmissible infection and causes persistent infection in the host. HSV consists of two distinct serovars, HSV-1 and HSV-2.

- Type 1 is associated with both oropharyngeal and genital infection
- Type 2 is associated with genital infection

HSV infection may be acquired from an asymptomatic or symptomatic sexual partner. [3,4] HSV can be transmitted by either genital or oral sexual contact. Clinical manifestations depend on site of viral entry and immunity from previous exposure. [5,7] Non immune sexual partners may experience severe clinical manifestations when first infected but can also be asymptomatic.

Of major public health concern is the role of HSV in increasing the risk of HIV transmission and acquisition.[5,7] Genital herpes is a life long infection.

SYMPTOM HISTORY SUGGESTIVE OF HSV
• Multiple vesicular lesions • Painful lesions • Itchiness and tingling sensation • Developed over a period of days after sexual contact • Lymphadenopathy • Systemic signs such as fever, myalgia • Previous lesions that have become ulcerative • Recurrent lesions in same area • Partner with HSV infection

Table C4.1: Symptom History [6,7,9,10,11]

Lesions characteristically progress from the papular stage to vesicles, pustules and open ulcerative lesions which eventually crust. Re-epithelialization and complete healing occur spontaneously.

- Type 1 is increasingly associated with primary genital infection
- Primary infection occurs when an HSV seronegative person acquires HSV-1 or HSV-2
- Initial non primary is when a person with antibody against one virus type acquires the opposite type
- Primary and initial non primary infections are often asymptomatic or unrecognised

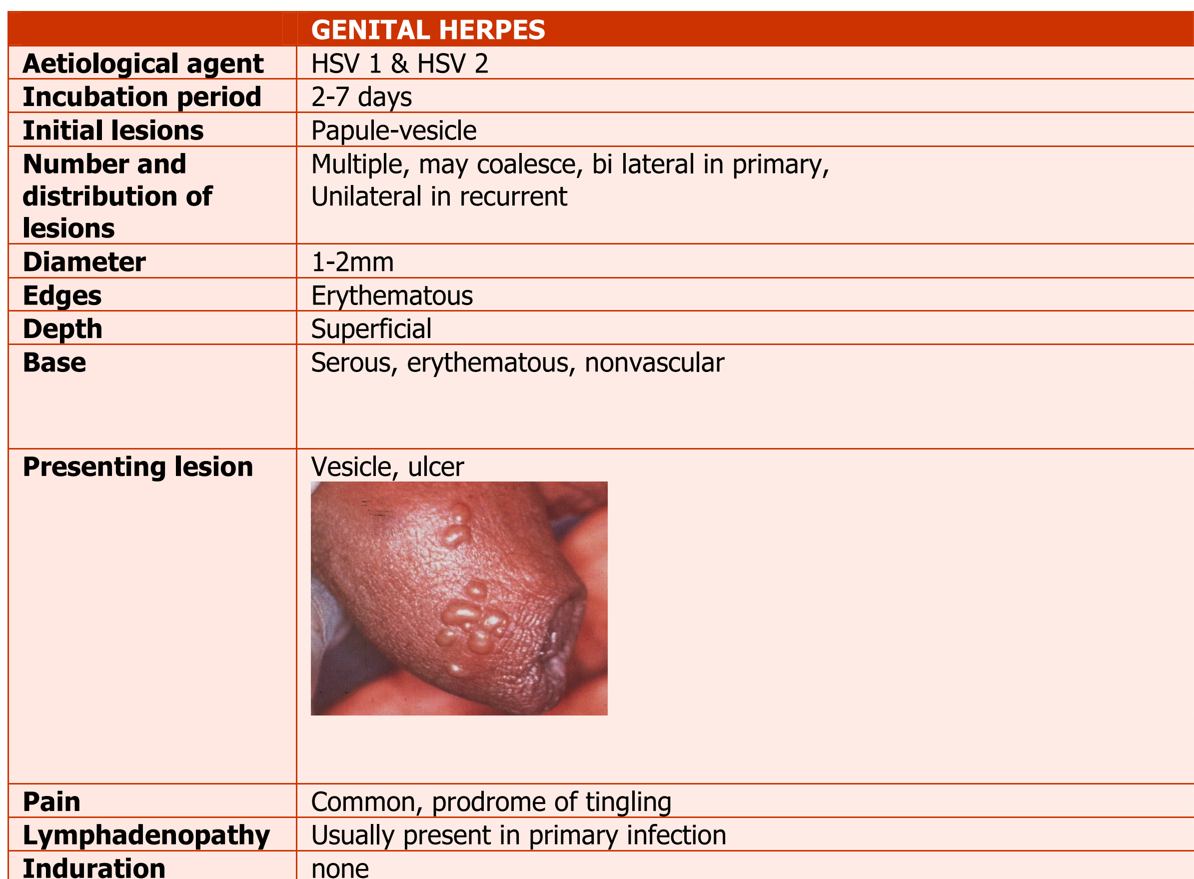
PRIMARY	RECURRANT
Multiple widespread painful lesions with associated systemic symptoms • Dysuria • Fever • Lymphadenopathy	Localised unilateral lesions • History of recurrent lesions • Mild-moderate symptoms of pain, tingling and itchiness

Table C4.2: Primary and recurrent HSV

SEQUELAE

The most serious consequence of genital HSV infection is neonatal herpes, transmitted from the infected mother as a result of exposure of the baby to the virus during vaginal delivery. Other clinical sequelae include;

- Genital ulceration
- Gingivostomatitis
- Urethritis
- Cervicitis
- Proctitis
- Urinary retention
- Viral symptoms
- Meningitis



	GENITAL HERPES
Aetiological agent	HSV 1 & HSV 2
Incubation period	2-7 days
Initial lesions	Papule-vesicle
Number and distribution of lesions	Multiple, may coalesce, bi lateral in primary, Unilateral in recurrent
Diameter	1-2mm
Edges	Erythematous
Depth	Superficial
Base	Serous, erythematous, nonvascular
Presenting lesion	Vesicle, ulcer
Pain	Common, prodrome of tingling
Lymphadenopathy	Usually present in primary infection
Induration	none

Table C4.3: Primary and recurrent HSV (photos courtesy of MSHC)

INVESTIGATIONS AND DIAGNOSIS

The sexual history of the client is of value in determining the etiology of genital ulcers. HSV and syphilis have specific characteristics and have prevalence within specific core groups. The visual inspection of the lesion or ulcer may help inform the diagnosis.
Genital ulcers will require collection of direct microbiological specimens and serological testing. [9,10,11]

Investigations for HSV include [9]

- HSV PCR type specific swab of lesion
- HSV EIA type specific serology if appropriate
- Investigations to exclude other causes of genital ulcer disease

HSV PCR
A swab is taken of the lesion for detection of HSV I and HSV II

- The longer the lesion is present the less viral DNA

TYPE-SPECIFIC SEROLOGY
There are now a number of simple commercially available ELISA tests for type-specific HSV infection.

- Tests vary in their reliability and reproducibility.
- A positive test implies that the person has been infected with one or both of viruses at some time in the past.
- Positive tests provide information about previous exposure to one or both of these viruses

HSV 1	HSV2	TEST INTERPRETATION
-	-	This result implies that the individual has not been infected with either of these two viruses. However, as these tests may take up to six weeks to become positive, the test results will be unreliable if there has been recent sexual exposure. HSV-2 antibodies are lost at a rate of 0 5-1 0% per year, at least in asymptomatic patients.
+	-	This result implies that the individual has been infected with HSV-1 at some time in the past. Usually the infection is acquired in childhood and involves the orofacial region.
+	+	This result indicates that the individual has been infected both with HSV-1 and HSV-2. The most likely explanation is that the individual acquired orofacial HSV-1 as a child and then acquired genital HSV-2 as an adult.
-	+	This result implies that the individual has been infected with HSV-2 at some time in the past, almost always sexually

Table C4.4: Interpretation of HSV serology [11]

TREATMENT AND MANAGEMENT

TREATMENT INDICATORS

- Clinical diagnosis based on examination findings
- Laboratory confirmed diagnosis

HSV [9]

Anti viral therapy is highly effective in treating first episode genital herpes and should be instigated if primary HSV is suspected. Topical ointments, steroids, antibiotics and complementary topical therapies are not recommended.

PRIMARY TREATMENT

- **Famciclovir 250mg tds for 5 days**

EPISODIC TREATMENT

- **Famciclovir 125mg bd for 5 days**

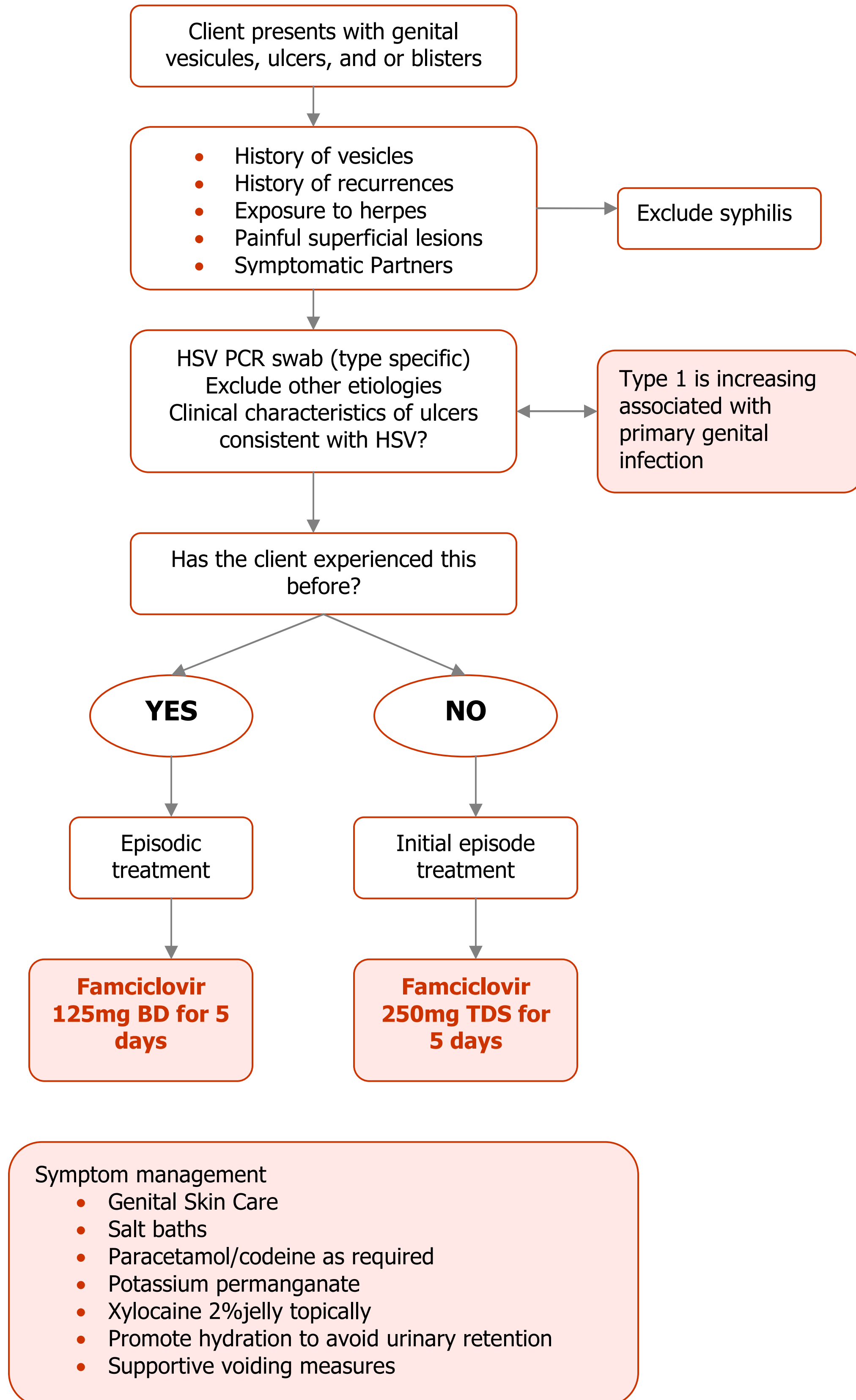
SYMPTOM MANAGEMENT [9,10,11,12]

- Genital Skin Care
- Salt baths
- Paracetamol/codeine as required
- Potassium permanganate
- Promote hydration to avoid urinary retention
- Supportive voiding measures

MANAGEMENT [9,10,11,12]

- STI information and safe sex counselling
- Informational counselling and assess psychological impact of HSV
- Medication regimen information
- Review compliance, adverse effects and side effects of prescribed medication
- Advise no sexual contact until lesions resolve
- MO review if symptoms persist post treatment

CLINICAL ALGORITHM



MEDICATION FORMULARY

DRUG	INDICATIONS	ROUTE	DOSE	FREQUENCY	THERAPEUTIC CLASS/ Poisons Schedule	CONTRAINDICATIONS/ INTERACTIONS	PRECAUTIONS/ ADVERSE EFFECTS
Famiciclovir	Treatment of Herpes initial and episodic	oral	250 mg	**Primary**: 250mg orally TDS for 5 days **Recurrent**: 250 mg, 2 tablets stat then 1 tablet every 12 hours for 3 doses	S4 B1	Known hypersensitivity to acyclovir or valaciclovir	Renal and hepatic impairment Pregnancy, lactation
						Nil significant interactions	Head ache, dizziness, nausea, GI upset, skin rash

REFERENCE

1. Anderson NJ, Beutner R ,Chakrabarty A, Tyring SK. Valacyclovir for the management of herpes viral infections. Skin Therapy Letter. 2005; 10(1).

2. Trying S, Richwald G, Haamed K. Single-day therapy: an expert opinion on a recent development for the episodic treatment of recurrent genital herpes. Archives of Gynecology and Obstetrics. 2007; 275:1-3.

3. Corey L. Challenges in genital herpes simplex virus management. Journal of Infectious Diseases. 2002; 186(1): 29-33.

4. Aoki FY, Trying S, Diaz-Mitoma F, Gross G, Goa J, Hamed K. Single day, patient-intiated famciclovir therapy for recurrent genital herpes: a randomized, double-blind, placebo-controlled trial. Clinical Infectious Diseases. 2006; 42: 8-14

5. Leone PA, Trottier S, Miller JM. Valacyclovir for episodic treatment of genital herpes: a shorter 3-day treatment course compared with 5 day treatment. Clinical Infectious Diseases. 2002; 34: 958-962.

6. Corey l, Bodsworth N, Mindel A, Schacker T, Stanberry L. An update on short course episodic and prevention therapies for herpes genitalis. Herpes. 2007; 14: 1. 5-11.

7. Warren T, Harris J, Brennan CA. Efficacy and safety of valacyclovir for the suppression and episodic treatment of herpes simplex virus in patients with HIV. Clinical Infectious Disease. 2004; 39(suppl5).

8. Department of Health and Ageing. Australian National medicines policy 2000. Canberra. Commonwealth of Australia; 1999.

9. Bullock S, Manias E, Galbraith A. Antiviral drugs. In: Bullock S, Manias E, Galbraith A. Fundamentals of pharmacology. 5th ed. Sydney: Pearsons Education Australia; 2007. p.939-956.

10. Beauman JG. Genital herpes: a review. American Family Physician. 2005; 72(8): 1527-1534.

11. Gilbert S, Corey L, Cunningham A, Malkin J, Stanberry L, Whitley R, Spruance S. An update on short course intermittent and prevention therapies for herpes labialis. Herpes. 2007; 14: 1. 13-18.

12. Patel R Rutland E. Has episodic treatment of recurrent genital herpes come of age? International Journal of STD & AIDS. 2007; 18: 437-439.

13. Corey L, Ashley R. Prevention of herpes simplex virus type 2 transmission with antiviral therapy. Herpes. 2004; 3: 170-174.

14. Queensland Health. Queensland clinical practice guidelines for advanced sexual and reproductive health nursing officers. Public Health Service Branch. Queensland Government. 2007.