

## SCOPE OF PRACTICE

### TARGET POPULATION

- Clients presenting with ano genital lesions

### EXCLUSION CRITERIA

- Clients who are pregnant or breast feeding
- Clients with past history of genital dermatosis
- Clients who are immunocompromised
- Clients presenting with persistent symptoms post treatment

## GUIDELINE OBJECTIVES AND ANTICIPATED OUTCOMES

- Determine cause of symptoms and identify probable aetiology, 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 as required

## BACKGROUND

### CONDITION DESCRIPTION

An ulcer is an area of tissue erosion in a localized area which results in the loss of the epidermis/dermis or mucous membrane.<sup>1</sup> Due to the erosion, an ulcer is characteristically concave, has definite margins and is usually associated with redness, serous moisture, and irritation until scabbing occurs.<sup>1,2</sup> Herpes simplex virus (HSV) is the most common cause of genital ulceration seen in clinical practice.<sup>3</sup> Treponema pallidum is the second most common cause and is seen increasingly in homosexually active men and clients with a history of sex in high prevalence countries.<sup>3,4</sup> Other causes of genital ulcers include trauma to the ano genital region, scabies, fixed drug reaction, dermatological and systemic causes.<sup>4,5</sup> A clear diagnosis may not be established for up to 40% of clients with genital ulcers.<sup>4</sup>

STI CAUSES	NON STI CAUSES	DERMATOLOGICAL
<ul style="list-style-type: none"> <li>• Genital herpes type 1 and 2</li> <li>• Syphilis – Treponema pallidum</li> <li>• Lymphogranuloma venereum- Chlamydia trachomatis (LGV strains)</li> <li>• Chancroid – Haemophilus Ducreyi (uncommon in Victoria)</li> <li>• Donavanosis – Klebsiella granulomatis (uncommon in Victoria)</li> </ul>	<p>Bacterial &amp; Viral</p> <ul style="list-style-type: none"> <li>• Candida</li> <li>• Herpes zoster</li> <li>• Epstein-Barr virus</li> <li>• Genital trauma</li> </ul> <p>Drug reactions</p> <ul style="list-style-type: none"> <li>• Tetracyclines</li> <li>• Sulfonamides</li> <li>• Metaqualone</li> <li>• Barbiturates</li> <li>• Phenolphthalein laxatives</li> </ul>	<ul style="list-style-type: none"> <li>• Behcet’s syndrome</li> <li>• Aphthosis ulcers</li> <li>• Crohn’s disease</li> <li>• Malignancies</li> <li>• Erythema multiforme</li> <li>• Balanitis</li> <li>• Lichen sclerosus</li> <li>• Lichen planus</li> <li>• Psoriasis</li> <li>• Chemical irritation</li> </ul>

Table G2.1: Causes of ano genital ulcers <sup>3,4,5,6</sup>

### COMMON CAUSES OF GENITAL ULCERS GENITAL HERPES TYPE 1 AND 2

Genital Herpes Simplex (HSV) infection may be acquired from an asymptomatic or symptomatic sexual partner. <sup>3,4</sup> HSV can be transmitted by either genital or oral sexual contact. Clinical manifestations depend on site of viral entry and immunity from previous exposure. <sup>5,7</sup> Both HSV 1 and 2 can be transmitted to the genital area and may result in painful vesicles that evolve into ulcers with associated tingling and itching.

#### SYMPTOMS INCLUDE

- Genital ulceration
- Gingivostomatitis
- Urethritis
- Cervicitis
- Proctitis
- Urinary retention
- Viral symptoms (primary episode)

#### SYPHILIS

Sexually transmitted syphilis is characterised into different stages. Early or infective syphilis is generally accepted as occurring within the first two years of infection (incorporating primary, secondary and early latent syphilis). <sup>3,5,6,7</sup> The primary form of syphilis consists of an ulcer which may involve the genital, oral, ano-rectal areas. The ulcer (chancre) resolves spontaneously and is usually painless. The secondary stage is characterised by a generalised macopapular rash and lymphadenopathy and the chancre may still be present during this stage. Condylomata lata are the genital area lesions associated with secondary syphilis. <sup>6,7</sup>

#### SYMPTOMS INCLUDE

- Chancre
- Regional lymphadenopathy
- Varied dermatologic lesions
- Rash

## INVESTIGATIONS AND DIAGNOSIS

The sexual history of the client is of value in determining the aetiology of genital ulcers. HSV and syphilis have specific characteristics and have prevalence within specific population groups. The visual inspection of the lesion or ulcer will help inform the diagnosis. Genital ulcers will require collection of direct microbiological specimens and serological testing. <sup>9,10,11</sup>

### SYMPTOM HISTORY SUGGESTIVE OF HSV

- Multiple vesicular lesions
- Itchiness and tingling sensation
- Painful ulcers (bilateral)
- Develops over a period of days after sexual contact
- Lymphadenopathy
- Systemic signs such as fever, myalgia
- Recurrent lesions in same area
- Partner with HSV infection



PRIMARY  
INFECTION



RECURRENT  
INFECTION

### SYMPTOM HISTORY SUGGESTIVE OF SYPHILIS

- Single, painless and indurated ulcer in oral, anal or genital area
- Occurs 9-90 days after sexual contact
- Usually non tender
- Generalised maculopapular rash
- Sexual history may include:
  - MSM contact
  - Sexual contact in high prevalence country
  - Sexual contact with a street based sex worker

Table G2.2: Symptom History<sup>6,7,9,10,11</sup>

#### General Investigations

- Microscopy of ulcer
- Culture of ulcer

Investigations for non STI causes of ulcers include:<sup>9,11</sup>

- VZV PCR swab of lesion
- HBA plate for bacteria culture

Investigations for HSV include<sup>9</sup>

- HSV PCR type specific swab of lesion
- HSV EIA type specific serology if indicated

Investigations for Syphilis include<sup>11</sup>

- Dark field examination for  
Dark field examination of oral lesions can be complicated by the presence of oral treponemes
- Treponema pallidum PCR
- Syphilis serology

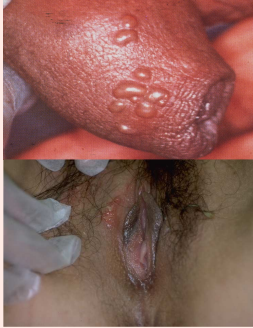



	<b>GENITAL HERPES</b>	<b>PRIMARY SYPHILIS</b>	<b>LGV</b>	<b>CHANCROID</b>
<b>Etiological agent</b>	HSV 1 & HSV 2	T.pallidum	C.trachomatis L1-L3	H.ducreyi
<b>Incubation period</b>	2-7 days	10-90 days avg 21 days	3 days to 6 weeks	3-10 days avg 4-7 days
<b>Initial lesions</b>	Papule-vesicle	papule	Papule pustule vesicle	Papulae or pustule
<b>Number and distribution of lesions</b>	Multiple, may coalesce, bi lateral in primary, Unilateral in recurrent	Usually one	Usually one	Single or multiple
<b>Diameter</b>	1-2mm	5-15mm	2-10mm	Variable
<b>Edges</b>	erythematous	Sharply demarcated, elevated, round or oval	Elevated. irregular	Undermined, ragged, irregular
<b>Depth</b>	Superficial	Superficial or deep	Superficial or deep	Excavated, deep
<b>Base</b>	Serous, erythematous, nonvascular	Smooth, non purulent, non vascular	Variable non vascular	Necrotic, purulent, vascular
<b>Presenting lesion</b>	Vesicle 	Chancre 	Ulcer/buboe 	Ulcer/buboe 
<b>Pain</b>	Common, prodrome of tingling	Uncommon	variable	Common severe
<b>Lymphadenopathy</b>	Usually present in primary infection	Firm, non tender bilateral	Tender, may suppurate, usually unilateral	Tender, may suppurate, usually unilateral
<b>Induration</b>	none	Usually present	Occasionally present	none

Table G2.3: Common causes of genital ulcer disease <sup>3,4,5,6,7</sup> (Photo's courtesy of MSHC)

## TREATMENT AND MANAGEMENT

### TREATMENT INDICATORS

- Clinical diagnosis based on sexual history and examination findings
- Laboratory confirmed diagnosis

### HSV PRIMARY TREATMENT

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

For HSV management refer to Clinical Management of uncomplicated HSV infection (CPG C4)

### 1° OR 2° SYPHILIS TREATMENT

- **Benzathine Penicillin 1.8 gm IMI stat**
- **Lignocaine 1% injection dilution**

For Syphilis management refer to Clinical Management of Syphilis infection (CPG C5)

### BALANITIS TREATMENT

- **CLOTRIMAZOLE CREAM 1% BD FOR 7-14 DAYS or**
- **HYDROZOLE CREAM 1% BD FOR 7-14 DAYS and**
- **POTASSIUM PERMANGANATE 1:8000 WASH**

For Balanitis management refer to Clinical Management of Balanitis (CPG M2)

### DERMATITIS

For Dermatitis management refer to Clinical Management of Genital Dermatitis (CPG G3)

### SYMPTOM MANAGEMENT <sup>9,10,11,12</sup>

- Genital Skin Care
- Salt baths
- Paracetamol/codeine as required
- Potassium permanganate wash
- Xylocaine 2% jelly topically
- Promote hydration to avoid urinary retention
- Supportive voiding measures

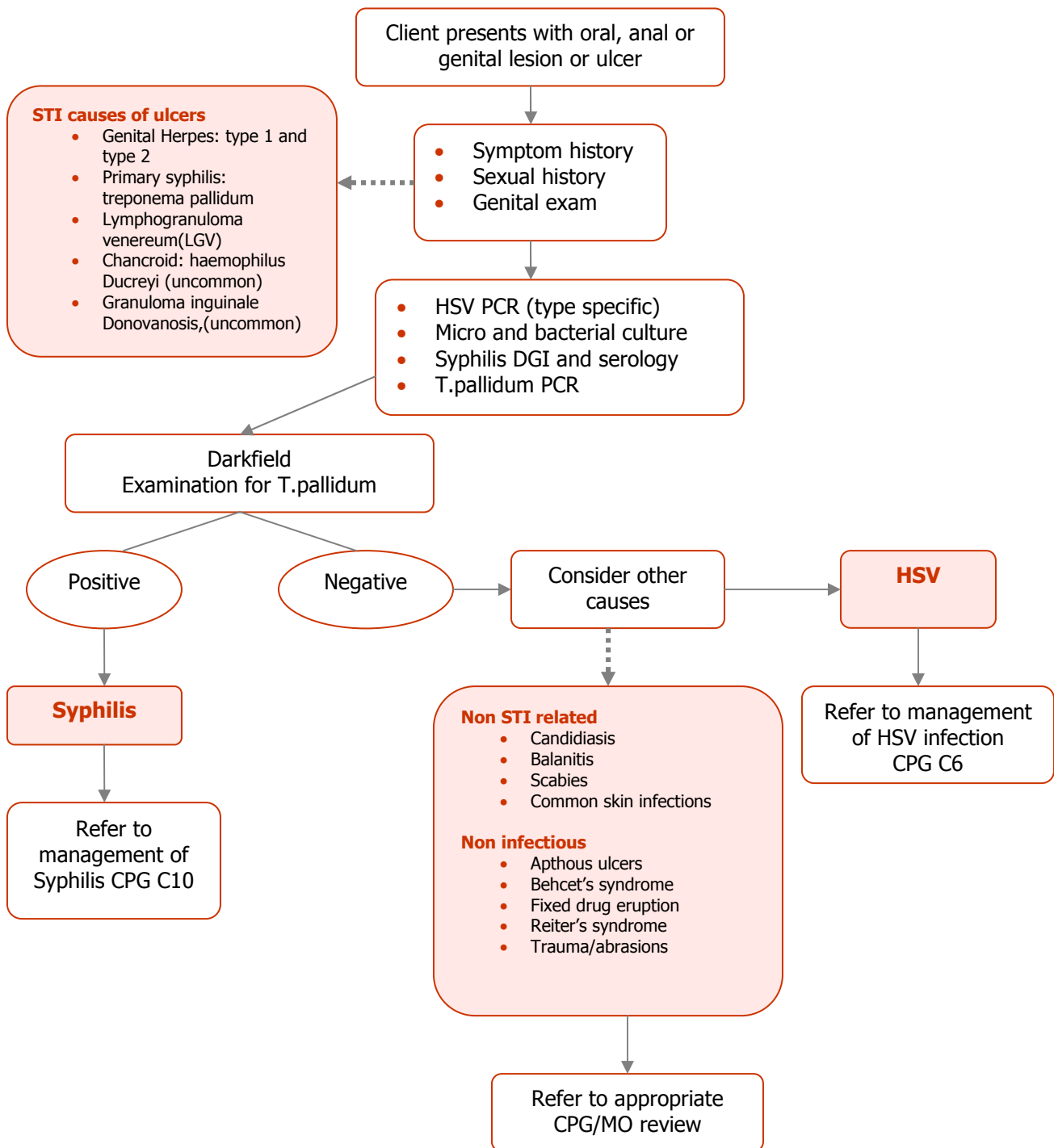
### MANAGEMENT <sup>9,10,11,12</sup>

- Refer to individual CPGs for further management guidelines
- Review compliance, adverse effects and side effects of prescribed medication
- Partner notification is required for syphilis
- MO review if symptoms persist post treatment
- Serological follow up for Syphilis positive clients as per MSHC Follow up policy

## PUBLIC HEALTH CONSIDERATIONS - FOLLOW UP AND REVIEW

- Refer to MO for review if symptomatic post treatment
- All clients with positive results will undergo follow up according to MSHC follow up procedures including recall for treatment and results, serological monitoring, test of reinfection, test of cure, Department of Human Services (DHS) notification and surveillance forms, partner notification and assistance in contact tracing.

## CLINICAL ALGORITHM



## REFERENCE

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