# Symptoms and Signs of Herpes Simplex Virus What to Do—HERPES!

Provider's Guide for Uncommon Suspected Sexual Abuse Scenarios Ann S. Botash, MD

### Background

#### Herpes can present in any of several ways:

- herpetic gingivostomatitis
- herpes labialis
- genital herpes
- herpetic keratoconjuctivitis
- herpetic whitlow,
- herpes gladiotorum
- herpes encephalitis
- eczema herpeticum

#### The differential diagnosis of ulcerative lesions in the genital area is broad. Infectious causes:

- chancroid
- genital HSV infection
- granuloma inguinale (donovanosis)
- candida,
- Iymphogranuloma venereum

### Non-infectious causes:

- lichen planus
- Behçet syndrome
- trauma

# History

#### Symptoms

#### Skin lesions are typically preceded by prodromal symptoms:

- burning and paresthesia at the site
- lymphadenopathy
- fever

loss of appetite

•malaise

•myalgia

•headaches

Exposure history

Identify anyone with any of the various presentations of genital or extragenital ulcers.

Determine if there has been a recurrence.

- Determine if there are any risk factors for infection:
  - eczematous skin conditions
  - immunocompromised state of patient and/or alleged perpetrator.

Rule out autoinoculation or consensual transmission.

- syphilis,
- scabies,
- CMV or EBV
- varicella or herpes zoster virus (VZV)

### Physical

**Cutaneous lesions consist of** small, monomorphous vesicles on an erythematous base that rupture into painful, shallow, gray erosions or ulcerations with or without crusting.

Clinical diagnosis of genital herpes is not very sensitive or specific. Obtain laboratory cultures for a definitive diagnosis.

## Lab Tests

### Viral culture (gold standard)-preferred test

- Must be from active lesions.
- Vigorously swab unroofed lesion and inoculate into a prepared cell culture.

### Antigen detection

- Order typing of genital lesions in children.
- DFA distinguishes between HSV1 & 2, EIA does not.

### Cytologic detection

- Tzanck Prep is insensitive (50%) and non-specific.
- PCR testing is sensitive and specific but the role in the diagnosis of genital ulcers is unclear. It is the best test for CSF diagnosis.

#### Type-specific serologic tests use antigens for HSV1 (gG1) and HSV2 (gG2)

- False negatives and false positives may occur.
- The accuracy of type specific HSV serology has not been well established in children.

## Documentation

Exposure history Recurrence history Skin condition Immunologic status of patient and alleged perpetrator Culture and type Antibody testing Photograph, video or drawing of lesions

### Reporting

In most cases, genital herpes should be reported. The diagnosis must be based on a laboratory (culture) confirmed genital herpes infection. The medical provider MUST REPORT when consensual transmission is unlikely or excluded, even if no clear statement from the child, no other abnormal exam findings and no behavioral symptoms.

# Genital Herpes Facts to Consider

Identification of a perpetrator is hindered because asymptomatic shedding is frequent and can result in transmission.

Beyond the neonatal period, most primary HSV infections are asymptomatic.

Incubation is 2-12 days, usually 4 days.

Active viral shedding lasts one week.

Symptoms are shorter with reactivation and shedding lasts only 3-4 days.

Although recurrence of herpes is generally less fulminant and less symptomatic, it is not possible to differentiate primary vs. recurrent herpes based on clinical findings alone. Because primary herpes may be asymptomatic, recurrence may be mistaken for primary infection.

The risk of acquiring HSV after an assault is unknown.

Risk factors:

- Contact with infected saliva-saliva transmits infection easily
- Contact with active lesions—virus remains stable outside of the host only for a short time period.
- Skin abnormalities of the child, such as eczema (eczema herpeticum)
- Patient with infection or exposure to a person with HIV or other immunocompromised state. HSV2 shedding is significantly higher in immunocompromised (HIV) patients.

## References

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CDC Website: <u>http://www2a.cdc.gov/stdtraining/self-study/hsv/hsv-sb1.asp</u>