GENITAL HERPES UPDATE: DIAGNOSIS & MANAGEMENT

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Overview

- Herpes epidemiology
- Signs and symptoms
- Diagnostics
- Pharmacology
- Counseling

Who is missing from this slide?
STIGMA

HSV-2 Prevalence in the US

- According to the CDC’s latest data, prevalence is 16.2% (men 11.5%; women 20.9%).
- 87.4% of HSV-2 seropositive survey participants have never received a herpes diagnosis.

Source: NHANES, 2005-2008

Unrecognized infection: What patients may tell you

- I have a yeast infection
- I have a UTI
- I cut myself shaving
- I have ingrown hairs
- I caught myself in my zipper
- I think I’m allergic to my new bubble bath
- I had rough sex
TYPICAL HERPES FINDINGS

▶ Vesicles
▶ Tender ulcers
▶ Inguinal lymphadenopathy
▶ Mucopurulent discharge
▶ Flu-like symptoms if primary (headache, fever, malaise).

The primary outbreak is usually the most severe.
▶ In addition to antivirals, offer analgesics, topical lidocaine
▶ Sitz baths for voiding

ATYPICAL HERPES FINDINGS

▶ Itchy spot
▶ Erythematous spot
▶ Fissure
▶ Unusual location – gluteal cleft, perianal, buttock, thigh
MOST COMMON HERPES FINDING?

NOTHING

DANGEROUS OR BENIGN?

COMPLICATIONS OF HSV-2

- Herpes encephalitis (rare, mostly HSV-1)
- Herpes keratitis (rare, mostly HSV-1)
- Neonatal herpes (mostly HSV-2)
- Increased risk for HIV acquisition
- Increased risk for HIV transmission

Genital HSV-1 infection

- HSV-1 is an increasingly common cause of newly diagnosed genital infection.
- Seroprevalence of HSV-1 antibodies only 30.1% in 14 to 19 year olds. This potentially makes adolescents more susceptible to acquisition of HSV-1 via oral-genital route.
- Fewer recurrences than genital HSV-2. Important for prognosis to type virus at the time of diagnosis.
Genital HSV-1 Infection

- Serology does not distinguish between orolabial and genital infection.
- Primary outbreaks symptoms similar in genital HSV-1 and HSV-2.
- Thought to be transmitted through oral to genital and genital to genital contact.

HSV Testing

- Herpes culture – lower sensitivity, high specificity, cheap
- Molecular diagnostics (PCR) – high specificity and sensitivity, more expensive
- Type-specific serology for HSV-2 IgG – variable specificity
- Western blot can be done for confirmation

Who should be offered HSV serology?

Per the CDC, offer serology for:
- Recurrent genital symptoms with negative culture or PCR
- Previous clinical diagnosis with no lab confirmation
- Sexual partner of +HSV person
Who should be offered HSV serology?

“Consider” serology for:
- Persons presenting for STI evaluation
- HIV+ persons
- MSM at increased risk for HIV acquisition

CDC’s rationale for not advising widespread screening:

“We need additional evaluation to understand the benefits of testing, including whether routine HSV-2 testing improves health and reduces spread of infection in the population. In addition, these tests can be expensive; false positive test results may occur in some persons with a low likelihood of infection; and the diagnosis may have adverse psychological effects for some people.”

Drug therapy for HSV

Three meds, not that different one from the other:
- Acyclovir (Zovirax)***
- Valacyclovir (Valtrex)
- Famciclovir (Famvir)

*** acyclovir 200 mg on Walmart, Target $4 formularies
**Drug therapy for HSV**

- **Acyclovir**
  - First episode: 400 mg tid x 7-10 days
  - Recurrent episode: 400 mg bid x 5 days
  - Suppressive therapy: 400 mg bid

- **Valacyclovir**
  - First episode: 1000 mg bid x 7-10 days
  - Recurrent episode: 500 mg bid x 3 days
  - Suppressive therapy: 500 mg or 1000 mg qd

- **Famciclovir**
  - First episode: 250 mg tid x 7-10 days
  - Recurrent episode: 125 mg bid x 5 days
  - Suppressive therapy: 250 mg bid

**EPISODIC VS SUPPRESSIVE THERAPY**

- **Drug therapy for HSV**
  - Patients should be told to initiate episodic therapy during first sign of an outbreak or impending outbreak. The aim of treatment is to shorten length of outbreak.
  - Topical antiviral therapy (Zovirax, Denavir) not particularly useful.
How effective is suppressive therapy?

- Landmark study: Corey et al, 2004: 48% reduction in transmission if symptomatic HSV-2+ monogamous heterosexual partner put on daily suppressive therapy.

Suppressive therapy

- Per CDC, “Suppressive antiviral therapy also is likely [emphasis added] to reduce transmission when used by persons who have multiple partners (including MSM) and by those who are HSV-2 seropositive without a history of genital herpes.

Suppressive therapy, cont.

- Long term safety has been established through multiple studies
- No specific data on the effectiveness of suppressive therapy for prevention of transmission in asymptomatic individuals
- Meds generally well-tolerated
Asymptomatic shedding

What is known:
- Occurs in people with or without outbreaks
- Can be very short-lasting
- Is detected in almost all asymptomatic seropositive individuals
- Can be reduced but not eliminated by daily antivirals (70-80% reduction)
- Frequency of shedding goes down with time elapsed since primary infection

Asymptomatic Shedding

What is not known:
- Quantity of virus needed to transmit infection
- To what degree does suppressive therapy reduce risk of transmission in the absence of outbreaks

HOW EFFECTIVE ARE CONDOMS?

Consistent condom users had a 30% lower risk of HSV-2 acquisition compared with those who never used condoms.

HOW CLOSE ARE WE TO A VACCINE?

- Prophylactic and therapeutic vaccines are being studied.
- HSV-1 and HSV-2.
- Most approaches are still in the pre-clinical phase. A few in phases I and II.
- “The HSV vaccine pipeline is rich with promising novel strategies…”


Neonatal herpes infection

- Rare: estimates 8-60/100,000; 1500 cases in the US annually.
- Most cases acquired during childbirth.
- Highest risk: Maternal herpes acquired late in pregnancy / perinatal primary outbreak.

- Prevent acquisition of genital HSV infection during late pregnancy.
- Avoid exposure of neonate to lesions and shedding at the time of delivery (suppressive therapy / Caesarean section).
- Acyclovir, valacyclovir and famciclovir are all pregnancy category B.
COPING WITH GENITAL HERPES

- Education
- Empathy / reassurance / normalization
- Grief work / counseling / support groups
- Partner notification / testing

HSV Resources for Patients

- American Sexual Health Association Herpes Resource Center
- The Updated Herpes Handbook by Terri Warren, NP (downloadable pdf)
- http://www.cdc.gov/std/herpes/

QUESTIONS?