Genital Herpes Simplex Virus: Current Research, Diagnosis and Management

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Disclosures

- None

Objectives

- Differentiate the different diagnostic tools for discovering herpes simplex virus 1 (HSV1) and herpes simplex virus 2 (HSV2).
- Accurately identify atypical physical presentations of HSV1 and HSV2.
- Employ educational messages for patients to help prevent the transmission of HSV1 and HSV2.

Epidemiology

Epidemiology 2020

- HSV-1 and HSV-2 most common strains of genital HSV infection
  - Since early 2000's HSV-1 increasingly causing new cases of genital HSV
    - Rates of HSV-1 genital infections increased from 31% in 1993 to 78% in 2001
  - Risk factors:
    - Male gender (as 1st infected → transmitted to female partners)
    - Receptive oral sex
    - Younger age (<45)

Types of Infection

- Primary
  - Seronegative, lesion cultures positive
- Non-Primary
  - Seropositive for either HSV-1 or HSV-2 and lesion cultures positive for the opposite strain
- Recurrent
  - Seropositive for the same strain as is cultured from a lesion

SCREENING

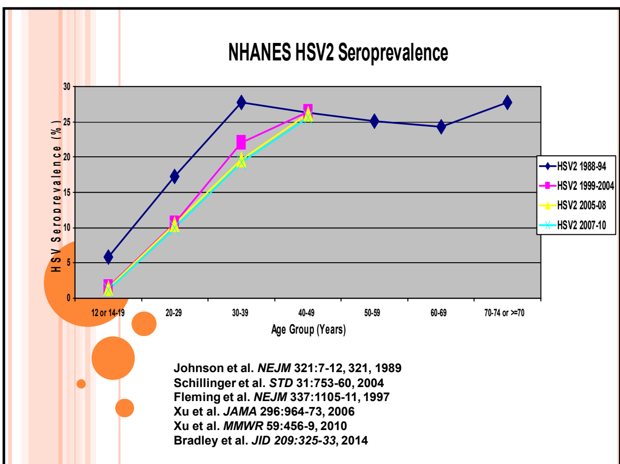
Audience Question

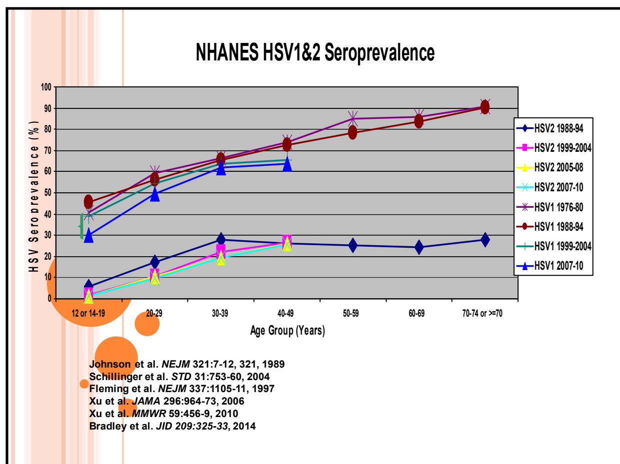
- A patient is seeing you for a visit, chief complaint "I want to get tested for everything." Assuming you have no significant information on history to make you concerned that this patient is already HSV positive, do you include HSV-1 and HSV-2 serological testing to the battery of tests?
- 1. Yes
- 2. No

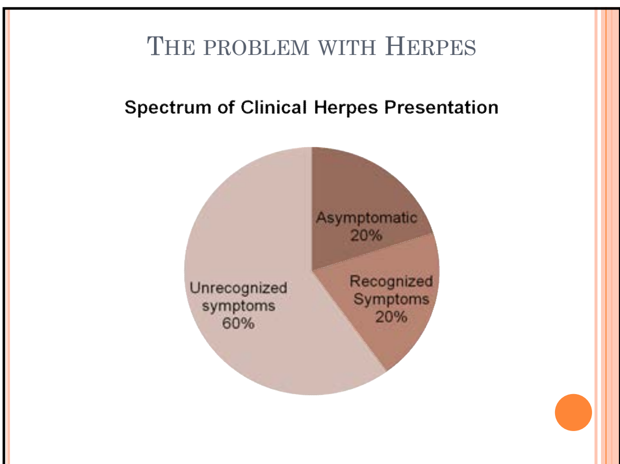
To Screen or Not to Screen…

2015 (and 2020) STD Treatment Guidelines

"Screening for HSV-1 and HSV-2 in the general population is not indicated."







Screening issues

- All tests are not created equal
- Conversion serologically can take weeks
- Seropositivity does not always mean active infection or viral shedding
- **Special considerations
  - Atypical genital symptoms
  - Partner with known HSV
  - Known HIV infection
  - MSM
  - Pregnant woman in third trimester *tricky

So, what should I tell patients?

- Simply, the test isn't good enough to use to screen
  - Should I withhold the test?- No, but have a detailed conversation FIRST
- Educate
  - What to look for, common presentations
  - Safe sex practices
  - Ask/disclose to partners
    - Reduce stigma

DIAGNOSING

Common presentations

- Genital infection
  - Recurrent burning or tingling +/- lesions
  - Recurrent itching +/- lesions
  - Singular or recurrent "shaving" bump or other recurrent lesion
  - Timed or triggered symptoms
    - Menstruation, sun, stress, sex
- Oral infection
  - Recurrent burning or tingling +/- lesions
  - "Fever blisters"
  - "Eczema of the lips"
  - Timed or triggered symptoms
    - Menstruation, sun, stress

Diagnostic work-up

- History is positive and well-documented
- Culture, culture, culture
  - Viral culture
    - Sensitivity decreases quickly, best to swab at first sign of symptoms
      - Open door policy
  - PCR
    - Awesome! (But not widely available)
  - Direct fluorescent antibody
    - Awesome! (But not widely available)
  - Tzanck Smear
    - No longer recommended unless no other option

Should I do serology now?

- In short, maybe… ☺
  - Draw to prove seronegativity → must recheck to see if conversion
  - To determine if antibodies already exist
  - **Caveat: Patient must have high enough health literacy to understand these subtleties

Audience Question

If, as a practitioner, you had no time limits, how long do you think your patients would like you to spend with them discussing their new diagnosis of genital herpes?

1. 15 minutes
2. 25 minutes
3. 45 minutes
4. 60 minutes

Diagnosis

- Study from 2004 showed that patients were satisfied with their care if they had 15 minutes face-to-face with practitioner.
- Key Points:
  - Most felt that a follow-up visit was helpful to answer questions and clarify key points
  - Much of the initial information was not retained 48 hours after visit.

I have what ?!?

- Initial visit suggestions for confirmed cases
  - The 4 T's
    - Transmission (Acquisition)
    - Treatment
    - Telling your partner
    - Therapist

4 T's Expanded- transmission pearls

- Acquisition could have occurred anywhere from 1-2 weeks to several months ago.
- Don't call a divorce lawyer!
  - Current partner may not be person patient acquired the infection from. Also, infected person may not be aware of infection.
  - Utilize patient's insight into their own sexual history.
- If the patient has an active outbreak, they are contagious now

4 T's expanded- treatment pearls

- Treatment can start today!
  - And it works!

- 1st episode is usually the worst
  - Many experience weeks or months between episodes
- For most, antivirals are easy to take
  - Minimal side effects
  - Minimal monitoring required by provider
- Lots of patient independence
  - Can have on hand to start at home
    - **Easier if prodrome

4 T's Expanded- Telling Partner(s)

- Maybe the hardest part for some patients
  - Good idea to have paper or e-resources available
- Perfect time to screen for DV
  - "Will you be safe if you tell your partner about this diagnosis?"
- Offer a visit with patient and partner
  - Helps with misinformation

4 T's expanded- therapist

- Listen more than you speak, especially after delivering "the news"
  - Use simple language

- Take your patient's cues about how much information they want
  - Practice patience, rushing will likely lead to confusion and a longer visit
- Allow for sorrow, anger, confusion, denial
  - **OFFER A FOLLOW-UP VISIT WITHIN 1-2 WEEKS**

Follow-up visit suggestions

- Natural history of the herpes virus
  - The virus enters the body through the skin or mucosa.
  - It establishes a latent infection in the paraspinous ganglia
- Transmission
  - Most contagious during an active outbreak, but asymptomatic shedding occurs.
  - Most shedding occurs within the first 12 months of infection.
  - Lifelong infection, even if only one lifetime outbreak**
    - **Try to remember how hard this is to hear

Follow-up Visit suggestions

- Recurrence
  - HSV-2 genital lesions more likely to recur than HSV-1 genital lesions
  - Multi-factorial etiology of subsequent outbreaks
    - Stress, sex, irritants, other infections, etc.
- Discuss common psychosocial concerns:
  - Lifelong infection
  - Fertility questions
  - Isolating diagnosis, difficult to discuss with support network
  - Stigma

Follow-up visit suggestions

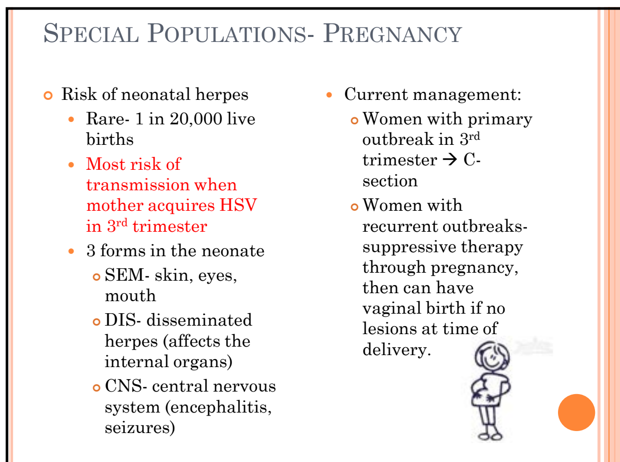
- Discuss the pros/cons of episodic vs. suppressive antiviral therapy.
  - Episodic therapy
    - Can be initiated by the patient without an office visit.
    - Best utilized with a clear prodrome
  - Suppressive therapy
    - CDC language re who qualifies
    - Adherence to daily med for true suppression.
    - Does not need to last for patient's lifetime

Follow-up visit suggestions

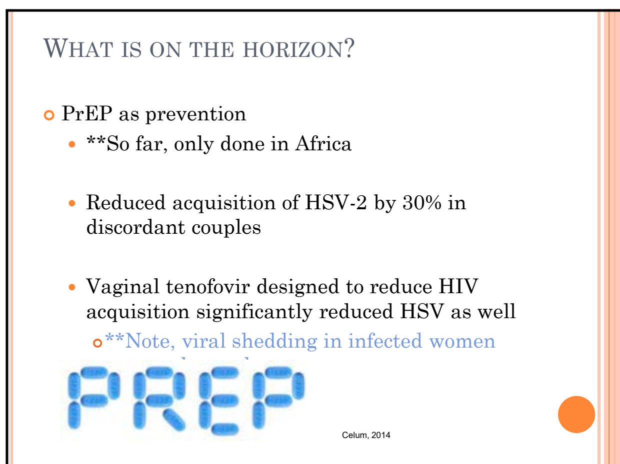
- Partner management
  - How did disclosure event go? How is patient feeling about it?
  - All partners in last 30 days should be notified.
  - Discuss when and how to disclose diagnosis to any new partners

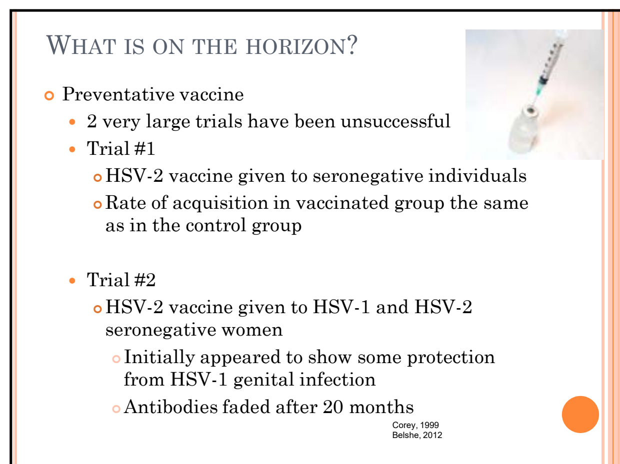
Special Populations- adolescents

- Have more confidentiality concerns, more likely to delay seeking treatment for symptoms.
- Less likely to disclose diagnosis to a partner.
- Less likely to regularly use condoms.
- Less likely to adhere to a daily medication regimen.
- More likely to affect psychosexual development.
- Concepts of asymptomatic shedding may be more difficult to understand.
- Must explain the transmission potential with oral-genital or genital-genital contact without penile penetration.



THE FUTURE OF HERPES MANAGEMENT





WHAT IS ON THE HORIZON?

- Therapeutic vaccine
  - Given to already HSV-2 positive persons in an effort to boost immunity and reduce recurrences
  - 3 trials- one showed benefit, two did not

Bottom line: no good vaccines right now, studies ongoing

Straus, 1994 &1997
de Bruyn, 2006

RESOURCES AND SUMMARY

Resources

- For Practitioners:
  - CDC STD Guidelines
    - www.cdc.gov/treatment
  - International Herpes Management Forum (IHMF)
    - www.ihmf.org/Physicians/physicianresources
    - Primary care toolkit
  - American Social Health Association (ASHA)
    - www.ashastd.org/herpes/herpes_overview.cfm

Resources

- For patients:
  - International Herpes Management Forum (IHMF)
    - www.ihmf.org/Patient/PatientResources.asp
    - Excellent "external links" section for patients to get more information.
  - American Social Health Association (ASHA)
    - www.ashastd.org/herpes/herpes_overview.cfm
  - Consider making a one-page handout covering the important aspects of the diagnosis for your practice.
  - Can order brochures to have in the waiting room/exam room from many sources.

Summary

- The diagnosis of genital herpes requires special counseling and education by all medical practitioners.
- Most patients will require more than one office visit to accomplish this effectively due to practitioner time constraints and patient's ability to absorb the information.

Summary

- This is a complicated diagnosis for most patients to understand. Attempt to use simple language and written resources to aid in counseling.
- This diagnosis carries a stigma- reserve judgment and have patience.
- Patients can be satisfied with their encounter in as little as 15 minutes- can do it!

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