ACTHIV 2016: A State-of-the-Science Conference for Frontline Health Professionals
Sexually Transmitted Infections: Your Doorway to Opportunities!

Laura Hinkle Bachmann, MD, MPH
Professor of Medicine
Wake Forest University Health Sciences
Winston-Salem, NC
Co-Director
Alabama/North Carolina STD Prevention Training Center
Objectives:

1. Implement at least three new strategies for diagnosing and managing STIs in HIV-infected individuals.

2. Apply best practices for counseling HIV-infected individuals diagnosed with a new STI
Three Key “Must Haves” for Providers Starting Out
SEXUAL HEALTH – A USEFUL FRAMEWORK
Sexual Health

Sexual health is a broad perspective that spans the entire lifespan encompassing topics which include:

<table>
<thead>
<tr>
<th>Sex Education</th>
<th>Family Planning</th>
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<tbody>
<tr>
<td>STD/HIV Management</td>
<td>Reproductive Tract Care</td>
</tr>
<tr>
<td>Interpersonal Relationships</td>
<td>Erectile Dysfunction/ Diminished Desire</td>
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Concept allows the provider to take a gain-framed approach, reducing stigma
CHECK YOUR ASSUMPTIONS AT THE DOOR...
Assess routinely...

3 Questions...

• When was the last time you had sex?
• How many partners have you had in the past year?
• Were they men, women or both?

Depending on responses→

Expounded history

• Types of sexual practices (anatomic sites of sexual contact)
• Condom and other barrier protection use
• Partner history (if known) – i.e. partner with recent STD symptoms or treatment; partner sexual history
EXAMINE ALL ORIFICES – IT CAN BE ENLIGHTENING!
“Pearls” for Experienced Providers
Name the syphilis stage...
Syphilis titers – Otherwise known as “job security” in venereology!

Nontreponemal Tests (VDRL, RPR)
   Antigen -
   cardiolipin-lecithin-cholesterol
   Quantitative

Treponemal Tests (FTA-ABS, MHA-TP, TPPA, EIAs)
   Treponemal Antigens
   Qualitative
Interpretation of Changing STS Titers

Error of RPR VDRL Tests - ± 1 dilution

Meaningful change is 2 dilution (or 4-fold) change in titer
  e.g. 1:2 ⇓ 1:4 or 1:1, no meaningful change
  1:2 ⇓ 1:8, meaningful change

Quantitative RPR or VDRL test, results are not interchangeable

Two dilution decline in titer indicates response to therapy however, failure to decline ≥ 2 dilutions does not necessarily mean patient has failed treatment
SYPHILIS THERAPY: RESPONSE TO THERAPY

• Primary or Secondary Syphilis – Fourfold (2 dilution) or greater decline in RPR or VDRL titers by 6-12 month follow-up
  – 15-20% of patients treated for primary or secondary will not achieve this by 6 months

• Early Latent/unknown duration Syphilis – Fourfold (2 dilution) or greater decline in RPR or VDRL titers by time of 12-24 month follow-up

Clinical Advisory: Ocular Syphilis in the United States

Updated March 24, 2016

Between December 2014 and March 2015, 12 cases of ocular syphilis were reported from two major cities, San Francisco and Seattle. Subsequent case finding indicated more than 200 cases reported over the past 2 years from 20 states. The majority of cases have been among HIV-infected MSM; a few cases have occurred among HIV-uninfected persons including heterosexual men and women. Several of the cases have resulted in significant sequelae including blindness.

Ocular syphilis can involve almost any eye structure, but posterior uveitis and panuveitis are the most common. Additional manifestations may include anterior uveitis, optic neuropathy, retinal vasculitis and interstitial keratitis. Ocular syphilis may lead to decreased visual acuity including permanent blindness. Ocular syphilis can be associated with neurosyphilis. Both ocular syphilis and neurosyphilis can occur at any stage of syphilis, including primary and secondary syphilis. While previous research supports evidence of neuropathogenic strains of syphilis, it remains unknown if some Treponema pallidum strains have a greater likelihood of causing ocular infections.

The following regimen is recommended by the 2015 CDC Treatment Guidelines for gonorrhea treatment...

1. Azithromycin 2gm orally x 1
2. Cefixime 400mg orally x 1 plus doxycycline 100mg orally BID x 7 days
3. Ceftriaxone 250mg IM x 1 plus azithromycin 1gm orally x 1
4. All of the above
Bleeding – May be hemorrhoids, Maybe not!
Acute Proctitis Management
2015 CDC STD Treatment Guidelines

• Ceftriaxone 250mg IM x 1
  plus
• Doxycycline 100mg po BID x 7 days**

**“Bloody discharge, perianal ulcers, or mucosal ulcers among MSM with acute proctitis and either a positive rectal chlamydia NAAT or HIV infection should be offered presumptive treatment for LGV with doxycycline 100 mg twice daily orally for a total of 3 weeks”

• +/- HSV and syphilis treatment depending on exam findings

2015 STD Treatment Guidelines: Gonorrhea (GC is a wiley bug!)

- **Recommended**
  - Ceftriaxone 250 mg IM
    
    Plus (even if chlamydia test negative)

    - Azithromycin 1gm po x 1

** Doxycycline 100mg po BID x 7d removed from preferred

Gonorrhea Treatment Alternatives

- Cefixime 400mg orally once
  Plus
- Azithromycin 1gm orally once regardless of CT

In case of severe allergy:
- Gentamicin 240mg IM or 5mg/kg IM plus azithromycin 2gm orally x 1
  OR
- Gemifloxacin 320mg orally x 1 plus azithromycin 2gm orally x 1

Which of the following is true...

1. Oral and rectal gonorrhea are almost always symptomatic
2. The tests of choice for extra-genital gonococcal and chlamydial testing are culture-based
3. In asymptomatic MSM, extra-genital testing uncovers more gonococcal and chlamydial infection than genital testing alone
## Performance of NAATs for Diagnosis of Pharyngeal and Rectal Gonorrhea

<table>
<thead>
<tr>
<th></th>
<th>% Sensitivity</th>
<th>% Specificity</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>phGC</td>
<td>rGC</td>
</tr>
<tr>
<td>Aptima (TMA)</td>
<td>100%</td>
<td>100%</td>
</tr>
<tr>
<td>ProbeTec (SDA)</td>
<td>97%</td>
<td>100%</td>
</tr>
<tr>
<td>Amplicor (PCR)</td>
<td>91%</td>
<td>96%</td>
</tr>
<tr>
<td>Culture</td>
<td>65%</td>
<td>72%</td>
</tr>
</tbody>
</table>

Proportion of CT and GC infections MISSED among 3398 asymptomatic MSM if screening only urine/urethral sites, San Francisco, 2008-2009

Marcus et al, STD Oct 2011; 38: 922-4
Don’t be Trick’d

- Most common “curable” STI in HIV+ women
- Most often asymptomatic
- Highest prevalence in >35yo
- NAAT-based testing most sensitive

Kissing and Adamski, STI 2013; 89 (6): 426-33;
Miller and Nyirjesy, Curr Infect Dis Rep 2011; 13:595-603;
Schwebke JCM Dec 2011; p4106-4111
**Recommended Regimen**
Metronidazole 2 g PO single dose  OR  Tinidazole 2 g PO single dose

**Alternative Regimen (recommended if HIV+)**
Metronidazole 500 mg po BID for 7 days

**Treatment Failure of 2 g metronidazole single dose**
Metronidazole 500 mg BID x 7d

**Treatment Failure – Additional Options**
Tinidazole or metronidazole 2 g PO daily x 7d  
Consider tinidazole 2-3g PO daily x 14d plus intravaginal tinidazole

*Manage in consultation with CDC (telephone: 404-718-4141; website: [http://www.cdc.gov/std](http://www.cdc.gov/std)) and/or Infectious Disease expert; Workowski KA and Bolan GA. MMWR Recomm Rep 2015;64(No. RR 3):1-138.*
Case

• MO is a 36 yo male with well-controlled HIV (CD4 840; HIV VL target undetected); denies symptoms
• Reports 8 male partners/2mo
• No condoms for oral sex; 100% condom use with insertive anal; carries female condoms with him for receptive anal sex but has not used them.
• Physical exam significant
• You treat him with 2.4 MU bicillin
• RPR returns 2 days later (1:128)
What stage of change do you think he is in regarding unprotected receptive anal sex?

1. Precontemplation
2. Contemplation
3. Preparation
4. Action
5. Maintenance
Counseling – Where do we go?

IT'S BEEN LOVELY
BUT I HAVE TO SCREAM NOW

ACT HIV
THE AMERICAN CONFERENCE FOR THE TREATMENT OF HIV
## Effective Brief Behavioral Counseling: Broad Concepts (Tailor, Tailor, Tailor!)

<table>
<thead>
<tr>
<th>Interactive</th>
<th>Dissatisfaction with the status quo</th>
</tr>
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<tbody>
<tr>
<td>Based on patient’s individual circumstances</td>
<td>Advantages of change</td>
</tr>
<tr>
<td>Based on patient’s readiness to change</td>
<td>Optimism about change</td>
</tr>
<tr>
<td>Uses a harm-reduction approach</td>
<td>Intention to change</td>
</tr>
<tr>
<td></td>
<td>Looking back</td>
</tr>
<tr>
<td></td>
<td>Looking forward</td>
</tr>
<tr>
<td></td>
<td>Exploring goals and values</td>
</tr>
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From: Ask Screen Intervene curriculum; Al Dawson
Step 1: Summarize Patient Risk Behavior

• WHO:
  – Sexual & substance using partners: gender, concurrent, serial......main or casual.....HIV status of partner (PrEP)

• WHAT:
  – Sexual & substance use behaviors & practices

• HOW:
  – Condoms, substance use, partner status

From: Ask Screen Intervene curriculum
Step 2: Assess Patient’s Perception of Risk

- What concerns do you have about giving HIV to someone else?
- What concerns do you have about getting an STD or hepatitis?
- What do you see as the riskiest thing you are doing now?
# Step 3: Assess Readiness

<table>
<thead>
<tr>
<th>Precontemplative</th>
<th>Contemplative</th>
<th>Ready for action</th>
<th>Action</th>
<th>Maintenance</th>
</tr>
</thead>
<tbody>
<tr>
<td>“What problem?”</td>
<td>“Yes, but…”</td>
<td>“Let’s do it”</td>
<td>“Doing it”</td>
<td>“Living it”</td>
</tr>
<tr>
<td>Client sees no need to change behavior</td>
<td>Sees the need to change behavior, but has barriers</td>
<td>Is ready to change behavior and may have already taken some steps</td>
<td>Has changed behavior for a short period of time</td>
<td>Has changed behavior for a long period of time</td>
</tr>
<tr>
<td>Raise risk awareness</td>
<td>Discuss impact of behavior on others</td>
<td>Discuss pros &amp; cons, ambivalence/barriers</td>
<td>Reinforce goals</td>
<td>Praise success</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Teach skills</td>
<td>Promote self-efficacy</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Develop a plan</td>
<td></td>
</tr>
</tbody>
</table>

Step 4: Negotiate a Behavioral Goal

Identify a behavioral goal the patient is most ‘ready’ to try

• What do you feel ready to do to reduce your risk of STDs?
Want to know more about STDs? 
There’s an app for that.

CDC Treatment Guidelines App for Apple and Android

Available now, FREE!
Resources

www.stdptc.org

www.nnptc.org