Improving STD Screening in HIV Care

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California Department of Public Health-STD Control Branch

What are we going to cover today?

1. Epidemiologic trends in STDs among men who have sex with men
2. Screening recommendations
3. Taking a sexual history
4. Gonorrhea and chlamydia treatment
Let’s take a look at the data…

Chlamydia, Gonorrhea, and Early Syphilis

- Chlamydia: 486.1 (N=189,937)
- Gonorrhea: 138.9 (N=54,255)
- Early Syphilis: 24.0 (N=9,359)
Chlamydia, California versus United States Incidence Rates, 1990–2015

California

United States

CA=486.1
2014=456.1 (2015 n/a)

Chlamydia, Incidence Rates by Gender California, 1990–2015

Female

Total

Male
Note: Age was "Not Specified" for 0.3% of female cases and 0.3% of male cases for the given year. Since this disease is often asymptomatic, reported cases may reflect chlamydial infections identified through screening programs offered primarily to women.

Note: NA/AN = Native American/Alaskan Native, A/PI = Asian/Pacific Islander. Race/ethnicity "Not Specified" ranged from 32.9% to 37.7% of cases for males in any given year.
Office of AIDS Webinar: Improving STD Screening in HIV Care
California Prevention Training Center
May 16, 2017

Gonorrhea, California versus United States
Incidence Rates, 1941–2015

Gonorrhea, Incidence Rates by Gender, California, 1990–2015
Gonorrhea, Incidence Rates by Gender and Age Group (in years)
California, 2015

<table>
<thead>
<tr>
<th>Age Group (in years)</th>
<th>Rate per 100,000</th>
</tr>
</thead>
<tbody>
<tr>
<td>10-14</td>
<td></td>
</tr>
<tr>
<td>15-19</td>
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<tr>
<td>20-24</td>
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<td>25-29</td>
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<tr>
<td>30-34</td>
<td></td>
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<tr>
<td>35-44</td>
<td></td>
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<tr>
<td>45+</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td></td>
</tr>
</tbody>
</table>

Note: Age was "Not Specified" for 0.4% of female cases and 0.3% of male cases for the given year.

Gender of Sex Partner - Males
California Gonococcal Surveillance System (CGSS) 2015-2016

- All male GC cases, CA (not including SF)
  - Unknown: 9%
  - MSW: 9%
  - MSMW: 54%
  - MSM: 9%

- Interviewed cases
  - Unknown: 9%
  - MSW: 54%

Data are preliminary.
Site of Infection by Sexual Orientation, Sampled and Interviewed CGSS Cases, 2015-2016

Almost half of positive GC tests from MSM were from extragenital sites.

- Rectal and Throat: 7.05%
- Throat only: 23.04%
- Rectal only: 16.53%
- Genital source, with or without another site: 53.39%

<table>
<thead>
<tr>
<th></th>
<th>MSM (n=369)</th>
<th>MSW (n=209)</th>
<th>Female (n=284)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rectal and Throat</td>
<td>7.05%</td>
<td>99.04%</td>
<td>98.94%</td>
</tr>
<tr>
<td>Throat only</td>
<td>23.04%</td>
<td>99.04%</td>
<td></td>
</tr>
<tr>
<td>Rectal only</td>
<td>16.53%</td>
<td>99.04%</td>
<td></td>
</tr>
<tr>
<td>Genital source, with or without another site</td>
<td>53.39%</td>
<td>99.04%</td>
<td>98.94%</td>
</tr>
</tbody>
</table>

Genital includes urine, urethral, and other unspecified “genital” sites. Data are preliminary.

HIV Status Among MSM with Gonorrhea, 2015-2016 (Sampled and Interviewed California Gonococcal Surveillance System Cases)

30% of MSM with known HIV status were HIV+ at the time of their GC diagnosis.

- HIV Positive 30.2% (N=374)
- HIV Negative 69.8%

Note: N does not include HIV status unknown or refused to state: 39 cases in 2015-2016. Data are preliminary.
A higher proportion of MSM reported PrEP use in 2016 compared to 2015.

Data are preliminary.

Gonorrhea, Incidence Rates for Males by Race/Ethnicity
California, 2006–2015

Note: NA/AN = Native American/Alaskan Native, A/PI = Asian/Pacific Islander.
Race/ethnicity "Not Specified" ranged from 22.3% to 32.4% of cases for males in any given year.
Early Syphilis*
California versus United States Incidence Rates, 1941–2015

* Includes primary, secondary, and early latent syphilis.

Early Syphilis*, Cases by Gender
California, 1996–2015

* Includes primary, secondary, and early latent syphilis.

* 37 states were able to classify ≥70% of reported cases of primary and secondary syphilis as either MSM†, MSW†, or women for each year during 2011–2015.

† MSM = Gay, bisexual, and other men who have sex with men (collectively referred to as MSM); MSW = Men who have sex with women only.

Primary and Secondary Syphilis — Rates of Reported Cases by Region, United States, 2006–2015

Rate (per 100,000 population)
Primary and Secondary Syphilis — Reported Cases by Sex, Sexual Behavior, and HIV Status, 31 States*, 2015

<table>
<thead>
<tr>
<th>Cases</th>
<th>HIV -</th>
<th>HIV +</th>
</tr>
</thead>
<tbody>
<tr>
<td>MSW'</td>
<td>1000</td>
<td>1200</td>
</tr>
<tr>
<td>Women</td>
<td>1200</td>
<td>1000</td>
</tr>
<tr>
<td>MSM'</td>
<td>4200</td>
<td>3500</td>
</tr>
</tbody>
</table>

* 31 states were able to classify ≥70% of reported cases of primary and secondary syphilis as MSW', MSM', or women and ≥70% of cases as HIV-positive or HIV-negative during 2015.

† MSM = men who have sex with men; MSW = men who have sex with women only.

HIV Status among Early Syphilis* Cases Men who Have Sex with Men California, 2015

(N=5,375)

- HIV Negative: 44.1%
- HIV Positive: 55.9%

Note: N does not include HIV status unknown or refused to state: 546 cases in 2015.

* Includes primary, secondary, and early latent syphilis.
Increases in the Percentage of Self-reported PrEP use Among HIV-negative MSM with Early Syphilis in the California Project Area (excludes SF and LA)

Provisional data as of 2/21/2017

Early Syphilis*
Incidence Rates by Gender and Age Group (in years)
California, 2015

* Includes primary, secondary, and early latent syphilis.
Early Syphilis*
Incidence Rates for Males by Race/Ethnicity
California, 2006–2015

Note:  NA/AN = Native American/Alaskan Native, A/PI = Asian/Pacific Islander.
Race/ethnicity “Not Specified” ranged from 1.8% to 6.9% of cases for males in any given year.
* Includes primary, secondary, and early latent syphilis.

Key Points

- STDs are increasing in California
- In 2015, men who have sex with men made up 70% of MALE early syphilis cases and 63% of MALE gonorrhea cases in California
- A high proportion of the reported STD cases are in MSM who are HIV positive
- Increasing percentages of HIV negative MSM with STDs are reporting PrEP use
- Therefore, HIV care settings and clinics that prescribe PrEP provide opportunities to improve STD screening among populations at risk for STDs
STDs and HIV

STDs increase risk of HIV acquisition and transmission

- Reduce barriers to viral entry
- Increase number and density of HIV-1 receptor-positive cells via inflammation
- Contribute to an imbalance of protective vaginal flora
- Increase HIV concentrations in plasma, genital lesions or secretions

Wasserheit JN STD 1992; Hayes RJ AIDS 2010; Sexton STD 2005

Slide adapted from Dr. Stephanie Cohen
**STDs Predict Future HIV Risk**

<table>
<thead>
<tr>
<th>Condition</th>
<th>HIV Diagnosis Within 1 Year</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rectal GC or CT</td>
<td>1 in 15 MSM</td>
</tr>
<tr>
<td>Primary or Secondary Syphilis</td>
<td>1 in 18 MSM</td>
</tr>
<tr>
<td>No rectal STD or syphilis infection</td>
<td>1 in 53 MSM</td>
</tr>
</tbody>
</table>

*STD Clinic Patients, New York City. Pathela, CID 2013:57.*

**CDC Guidelines: STD Screening for MSM**

- HIV
- Syphilis
- Urethral GC and CT
- Rectal GC and CT (if anal sex)
- Pharyngeal GC (if oral sex)
- HSV-2 serology (consider)
- Hepatitis B
- Hepatitis C (HIV+ MSM at least annually)

*Anal Cancer in HIV+ MSM: Data insufficient to recommend routine screening, some centers perform anal Pap and HRA*

* At least annually, more frequent (3-6 months) if at high risk (multiple/anonymous partners, drug use, high risk partners)
STD Screening Recommendations: HIV-positive Men & Women

<table>
<thead>
<tr>
<th>STD</th>
<th>Testing site or test type</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chlamydia</td>
<td>Genital, rectal if exposed</td>
</tr>
<tr>
<td>Gonorrhea</td>
<td>Genital, rectal &amp; pharyngeal if exposed</td>
</tr>
<tr>
<td>Syphilis</td>
<td>Serology</td>
</tr>
<tr>
<td>Trichomoniasis</td>
<td>Vaginal</td>
</tr>
<tr>
<td>Hep B (HBsAg, HBsAb, HBcAb)</td>
<td>Serology</td>
</tr>
<tr>
<td>Hep C</td>
<td>Serology</td>
</tr>
<tr>
<td>HPV-related cancer</td>
<td>Cervical cytology for women, Anal cytology for MSM is controversial, digital anorectal exam may be useful for early detection</td>
</tr>
</tbody>
</table>

* Screen at least annually; repeat screening every 3-6 months as indicated by risk.


Strongest recommendations:
- Men who have sex with men
- HIV-infected individuals

Screening others was to be informed by national and local epi, hx incarceration, sex work

Proportion of MSM* Attending STD Clinics with Primary and Secondary Syphilis, Gonorrhea (GC) or Chlamydia (CT) by HIV Status†, STD Surveillance Network (SSuN), 2015

Percentage

<table>
<thead>
<tr>
<th></th>
<th>HIV-</th>
<th>HIV+</th>
</tr>
</thead>
<tbody>
<tr>
<td>P&amp;S syphilis</td>
<td>3%</td>
<td>18%</td>
</tr>
<tr>
<td>GC urethral</td>
<td>5%</td>
<td>12%</td>
</tr>
<tr>
<td>GC pharyngeal</td>
<td>7%</td>
<td>10%</td>
</tr>
<tr>
<td>GC rectal</td>
<td>9%</td>
<td>12%</td>
</tr>
<tr>
<td>CT urethral</td>
<td>4%</td>
<td>10%</td>
</tr>
<tr>
<td>CT rectal</td>
<td>6%</td>
<td>14%</td>
</tr>
</tbody>
</table>

* MSM = Gay, bisexual, and other men who have sex with men (collectively referred to as MSM).
† Excludes all persons for whom there was no laboratory documentation or self-report of HIV status.
‡ GC urethral and CT urethral include results from both urethral and urine specimens.

Estimating the Proportion of Persons Living with HIV in California Diagnosed with an STD, 2014

Of over 124,000 persons living with HIV in California:

- 7% Coinfected with at least one STD (CT, GC, or syphilis)
- 93% Not coinfected with an STD

PrEP and STIs
Kaiser Permanente San Francisco

STI Incidence After 12 Months of PrEP Use

Volk et al. CID 2015; Slide courtesy J. Volk

STI Incidence After 12 Months of PrEP Use

Majority of Rectal Infections in MSM are Asymptomatic

Rectal Infections

Chlamydia
n=316

Gonorrhea
n=264

86%

84%

Urethral Infections

Chlamydia
n=315

Gonorrhea
n=364

42%

10%

Volk et al. CID 2015; Slide courtesy J. Volk

Kent, CK et al, Clin Infect Dis July 2005
High Proportion of Rectal and Pharyngeal CT/GC Associated with Negative Urine Test, STD Surveillance Network (n=21994)

Can we screen only with a urine NAAT and assume we will identify pharyngeal and rectal infections? **No, we will miss majority of cases**

Chlamydia  
Missed 77%  
Identified 23%

Gonorrhea  
Missed 95%  
Identified 5%

*Patton et al CID 2014*  
*Marcus et al, STD Oct 2011; 38: 922-4*
Major conclusions

NAATs recommended for detection of genital tract infections in men and women – with and without symptoms

Optimal specimen types are:
- First catch urine for men
- Self collected vaginal swabs from women

NAATs recommended for: detection of rectal and oropharyngeal infections - not FDA-approved for rectal or pharyngeal specimens but remain the preferred testing method over culture

Chlamydia and Gonorrhea NAATs: Rectal and Pharyngeal Sites

- NAATs have not been cleared by FDA for these indications
- NAATs can be used by laboratories that have undergone validation procedures and met all regulatory requirements for an off-label procedure
- Large commercial labs accept these specimens
- Opportunity for self-collection (which may also require validation)
- CDPH can assist with lab protocols, billing codes

https://archive.cdph.ca.gov/programs/std/Pages/MSMToolkit.aspx

CDC. MMWR 2014 / 63(RR02):1-19
Van der helm, 2009, STD; Sexton, 2013 J Fam Pract; Dodge, 2012 Sex Health
Freeman 2011, STD; Alexander 2008, STI; Moncada 2009, STD
NAAT Laboratory Ordering and Billing Codes

<table>
<thead>
<tr>
<th>Company-Specific Ordering Codes for Combined GC/CT Nucleic Acid Amplified Tests (NAATs)</th>
<th>Company-Specific Ordering Codes for CT test only</th>
</tr>
</thead>
<tbody>
<tr>
<td>LabCorp*</td>
<td>LabCorp</td>
</tr>
<tr>
<td>Rectal 188672</td>
<td>188706</td>
</tr>
<tr>
<td>Pharyngeal 188698</td>
<td>70051</td>
</tr>
<tr>
<td></td>
<td>188714</td>
</tr>
</tbody>
</table>

Rectal and pharyngeal NAATs are offered at (or from) any location in the country with these two codes.

For information on specimen collection and transportation, clinicians should contact the local reference laboratory representative.

CPT Billing Codes

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<tr>
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</thead>
<tbody>
<tr>
<td>CT detection by NAAT</td>
<td>87491</td>
</tr>
<tr>
<td>GC detection by NAAT</td>
<td>87591</td>
</tr>
</tbody>
</table>

*CDC does not endorse these laboratories, however, they represent the largest laboratories nationally. There may be other private laboratories that have verified rectal and pharyngeal testing with NAATs. Many PHLs have also verified rectal and pharyngeal testing.

Bolan, CDC webinar March 2011

Self-collected Rectal/Pharyngeal STI Testing

- Highly acceptable, similar performance compared to clinician-collected specimens
- Self-collection can be performed at laboratory along with blood draw/urine collection or in the exam room before/after the provider visit
- May save patient an office visit
- May save the provider time
- Standing orders in EMRs may facilitate patient-collected testing

Van der helm, 2009, STD; Sexton, 2013 J Fam Pract; Dodge, 2012 Sex Health Freeman 2011, STD; Alexander 2008, STI; Moncada 2009, STD
Suboptimal STD Screening among MSM in HIV Care

- N=4217 interviews and chart reviews from Medical Monitoring Project, nationally representative sample of adults in HIV care

% of sexually active HIV+ MSM screened for STIs, N=1411

Flagg EW, 2015, STD
Office of AIDS Webinar: Improving STD Screening in HIV Care
California Prevention Training Center
May 16, 2017

STD Screening in Sexually Active HIV+ clinic patients in the CDC Medical Monitoring Project in San Francisco: 2013

- Syphilis: 70.0% (Self-Report), 73.0% (Medical Record Abstraction)
- Gonorrhea: 63.5%, 35.1%
- Chlamydia: 60.0%, 35.1%


Recommended Annual Gonorrhea and Chlamydia Screening Lags Behind Lipid Screening in Seven HIV-care Clinics

Berry JAIDS 2015
Identify Methods/Best Practices for Routinely Conducting a Sexual History

How Do We Know if Our Patients are at Risk for STDs/HIV?

- Infections are commonly asymptomatic, so relying on report of symptoms is not adequate
- *Discussions about risk behaviors are necessary*
Sexual History/Risk Assessment Guides Clinical Services & Prevention Efforts

- Allows individualization of STD/HIV diagnosis and screening for asymptomatic infection => detect disease and prevent serious sequelae
- Guides counseling through risk assessment => promote behavior change to prevent future infection
- Allows patient to express concerns and ask questions
- Enables appropriate referrals

Concerns about Taking a Sexual History

- Patients: confidentiality/privacy
- Providers:
  - Discomfort discussing sexual issues
  - What to ask and how to ask it
  - What to do with all the information
  - Accomplishing it quickly
Barriers to Taking a Sexual History

• Structural barriers (time/reimbursement concerns)
• Low priority given to STD prevention
  – Low priority given to sexual health issues
  – Acute versus preventive role perception
• Unfamiliarity with content or language
  – Perceived complexity of the sexual history
  – Inadequate training
• Provider discomfort discussing sexual health

Discomfort as a Barrier

“Ironically, it may require greater intimacy to discuss sex than to engage in it.”

The Hidden Epidemic: Confronting Sexually Transmitted Diseases

Institute of Medicine, 1997
Sexual History: How to begin...

- Acknowledge personal nature of the subject matter
  - “I know this is very personal information”
- Normalize conversation and emphasize confidentiality
  - “I talk to all of my patients about their sexual history because it is an important part of their health. Before I ask my questions, I want to let you know that everything we talk about is confidential.”
- Explain how the information will help you care for the patient
  - “This information will help me understand if there are issues with your health that I can help with.”

Summary: The Five “P’s”

- **Partners**
  - “Have your sex partners been males, females, or both?”
- **(Sexual) Practices**
  - “What types of sex did you have?”
- **Past STDs**
  - “What STDs have you had in the past?”
- **Prevention of STDs/HIV**
  - “What do you do to prevent getting an STD or HIV?”
- **Pregnancy history and plans**
  - “Are you and your partner planning on having a baby or getting pregnant in the next year?”
  - “What do you and your girlfriend use to prevent pregnancy?”
General Considerations for Taking a Sexual History

• Make no assumptions
  – Ask all patients about gender and number of partners
  – Ask about specific sexual practices
    ✓ Vaginal, anal, and oral sex

• Be clear
  – Avoid medical jargon
  – Clarify when necessary

More Considerations for Sexual History Taking

• Be tactful and respectful
  – Avoid showing surprise
  – Never use a family member as a translator

• Be non-judgmental
  – Recognize patient concerns
  – Recognize our own biases
  – Avoid value-laden language

“You should...”

“Why didn’t you...”

“I think you...”
Use Neutral Language

- Why didn’t you use a condom?
- Do you tell your partners that you are HIV positive?
- Why didn’t you finish all your medicine?

- What made it difficult to use a condom in that situation?
- What’s your approach to discussing HIV status with partners?
- What made it difficult to finish all your medicine?

What about Time Constraints or Issues Not Fully Discussed?

- Schedule follow-up visit
- Refer to a counselor (if available in clinic)
- Offer patient information sheets
- Refer to a specialized care source and/or hotline: support group, substance abuse treatment, domestic violence
Taking Personal Stock

- Helping clients change behavior may begin with changing some of our own:
  
  — Give it a try!!  
  Be willing to practice a new skill  
  
  — Work on recognizing biases and keeping them in check
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California Prevention Training Center  
May 16, 2017

Provider Report

Summary of patient’s answers

Recommendations for STD testing according to national guidelines

Suggestions for education and counseling “conversation starters”
Expert STD Clinical Services are a Key Principle in Reducing HIV in the United States

1.2.2 Support and strengthen integrated and patient-centered HIV and related screening (sexually transmitted infections [STIs], substance use, mental health, intimate partner violence [IPV], viral hepatitis infections) and linkage to basic services (housing, education, employment).

1.2.3 Expand access to effective prevention services, including pre-exposure prophylaxis (PrEP) and post-exposure prophylaxis (PEP).

Chlamydia and Gonorrhea Treatment

Chlamydia Treatment
Adolescents and Adults

**Recommended regimens** (non-pregnant):
- Azithromycin 1 g orally in a single dose
- Doxycycline 100 mg orally twice daily for 7 days

**Recommended regimens** (pregnant*):
- Azithromycin 1 g orally in a single dose

* Test of cure at 3-4 weeks only in pregnancy

CDC 2015 STD Treatment Guidelines [www.cdc.gov/std/treatment](http://www.cdc.gov/std/treatment)

Gonorrhea Dual Therapy
Uncomplicated Genital, Rectal, or Pharyngeal Infections

Ceftriaxone 250 mg IM in a single dose  **PLUS**  Azithromycin 1 g orally

- Regardless of CT test result

CDC 2015 STD Treatment Guidelines [www.cdc.gov/std/treatment](http://www.cdc.gov/std/treatment)
**Gonorrhea Treatment Alternatives**

**Anogenital Infections**

**ALTERNATIVE CEPHALOSPORINS:**
- Cefixime 400 mg orally once
  
  **PLUS**
  
  - Azithromycin 1 g, regardless of CT co-infection

**IN CASE OF SEVERE ALLERGY:**

<table>
<thead>
<tr>
<th>Treatment Options</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gentamicin 240 mg IM + azithromycin 2 g PO</td>
</tr>
<tr>
<td>OR</td>
</tr>
<tr>
<td>Gemifloxacin 320 mg orally + azithromycin 2 g PO</td>
</tr>
</tbody>
</table>

CDC 2015 STD Treatment Guidelines [www.cdc.gov/std/treatment](http://www.cdc.gov/std/treatment)

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**Who needs a test of cure for GC?**

- Patients with pharyngeal GC treated with an alternative regimen
  - Obtain test of cure 14 days after treatment, using either culture or NAAT
- Cases of suspected treatment failure (culture and simultaneous NAAT)
- Consider if using non-recommended or monotherapy

CDC 2015 STD Treatment Guidelines [www.cdc.gov/std/treatment](http://www.cdc.gov/std/treatment)
Examples of Complicated STDs

- Antibiotic-resistant gonorrhea
- Ocular syphilis

Screening for rectal and pharyngeal gonorrhea, and appropriate two drug treatment with ceftriaxone and azithromycin, are key strategies in reducing the risk of resistant *Neisseria gonorrhoeae*
Cephalosporin Treatment Failures

- Oral cephalosporin treatment failures reported worldwide
  - Japan, Hong Kong, England, Austria, Norway, France, South Africa, and Canada
  - No cephalosporin treatment failures reported in U.S. to date
- Ceftriaxone treatment failures in pharyngeal gonorrhea and a few isolates with high-level ceftriaxone resistance reported

*Neisseria gonorrhoeae* — Percentage of Urethral Isolates with Elevated Ceftriaxone Minimum Inhibitory Concentrations (MICs) (≥0.125 μg/ml) by Reported Sex of Sex Partner, Gonococcal Isolate Surveillance Project (GISP), 2006–2015

*MSM* = Gay, bisexual, and other men who have sex with men (collectively referred to as MSM);  *MSW* = Men who have sex with women only.
Gonococcal Isolate Surveillance Project (GISP), Percent of Neisseria Gonorrhoeae Isolates with CDC "Alert" Values for Azithromycin in California GISP STD Clinic Sites, 1992–Nov. 2016

Note: "Alert" values are set by CDC as markers to look at possible decreased susceptibility. Azithromycin alerts have MICs $\geq$ 2.0 $\mu$g/mL. No data before 1992. 2015-2016 data are provisional as of 2/13/2017

STD Clinic Sites: Long Beach (ended participation in 2007), Los Angeles (added in 2003), Orange, San Diego, San Francisco

Azithromycin Treatment Failure in California

NOTE

Failure of Azithromycin 2.0 g in the Treatment of Gonococcal Urethritis Caused by High-Level Resistance in California

Severin O. Gose, DrPH,* Olusegun O. Soge, PhD,† James L. Beebe, PhD,‡ Duyenh Nguyen, MPH,* Juliet E. Stolley, MD, MPH,§ and Heidi M. Bauer, MD, MPH§

Abstract: We report a treatment failure to azithromycin 2.0 g caused by a urinal Neisseria gonorrhoeae isolate with high-level azithromycin resistance in California. This report describes the epidemiological case investigation and phenotypic and genetic characterization of the treatment failure isolate.

index patient was treated with ceftriaxone 250 mg IM, which he tolerated well with no allergic reaction. On day 14, the index patient reported improvement in his symptoms. The isolate's presumptive identification was confirmed by the San Francisco Department of Public Health Laboratory based on NAAT (Aptima Combo 2; Hologic Inc, Bedford, MA) and a species-specific biochemical test (API NH; BioMérieux

Doctors fear spread of 'super-gonorrhoea' across Britain

Drug-resistant strain of sexually transmitted superbug at risk of becoming untreatable, say health experts

Press Association
Sunday 17 April 2016 06.39 EDT

A highly drug-resistant type of “super-gonorrhoea” is spreading across the country, with senior medics warning it may become untreatable.

A powerful strain of the sexually transmitted superbug first seen in the north of England has been found in the West Midlands and the south-east, Public Health England (PHE) said.

The strain is highly resistant to the antibiotic azithromycin, which means medics are relying on a second drug, ceftriaxone, to treat it. But there are no other effective drugs to tackle the strain, raising the prospect of it becoming untreatable if it builds further resistance.


Gonorrhea outbreak in Hawaii shows increased antibiotic resistance

By Susan Scutti, CNN
_updated 10:50 AM ET, Thu September 22, 2016
Suspected GC Treatment Failure

**TEST WITH CULTURE AND NAAT:**
- If GC culture not available, call your local health department

**REPEAT TREATMENT:**
- Gemifloxacin 320 mg + AZ 2g OR Gentamicin 240 mg IM + AZ 2g
- If reinfection suspected, repeat treatment with CTX 250 + AZ 1g

**REPORT:**
- To your local health department within 24 hours

**TEST AND TREAT PARTNERS:**
- Treat all partners in last 60 days with same regimen

**TEST OF CURE (TOC):**
- TOC 7-14 days with culture (preferred) and NAAT

Ocular Syphilis

Photo Courtesy: Dr. Kees Rietmeijer, STD Control, Denver PHD
Notes from the Field


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From December 1, 2014, to January 30, 2015, in King County, Washington, four cases of ocular syphilis, defined as clinical signs or symptoms consistent with ocular disease (e.g., uveitis or vision loss) in a person with laboratory-confirmed syphilis of any stage, were reported. All four cases occurred in men who have sex with men (MSM), two of whom were sex partners. Median age of the four patients was 39 years (range: 29–61). Three patients were legally blind after 5 months.

https://www.cdc.gov/mmwr/pdf/wk/mm6440.pdf

Slide courtesy of Drs. Torrone & Kidd, CDC

Clinical Advisory: Ocular Syphilis in the United States

Updated April 16, 2015

Since December 2014, 24 cases of ocular syphilis have been reported from California and Washington, with several other states reporting potential cases. 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.

Neurosyphilis can occur during any stage of syphilis including primary and secondary syphilis. Ocular syphilis, a clinical manifestation of neurosyphilis, 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. 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.

- Clinicians should be aware of ocular syphilis and screen for visual complaints in any patient at risk for syphilis (MSM, HIV-infected persons, others with risk factors and persons with multiple or anonymous partners).

- All patients with syphilis should receive an HIV test if status is unknown or previously HIV
Suspected Ocular Syphilis, 8 Jurisdictions, 2014-2015 (n=388)

- 93% male
  - 69% of males were MSM
- 56% white, 20% black, 12% Hispanic
- 51% HIV-infected
- Stage at diagnosis
  - 2% primary
  - 26% secondary
  - 20% early latent
  - 50% late or unknown duration
- 84% reported symptoms
  - 65% blurry vision
  - 33% vision loss
  - 14% pain or red eye
- 41% had eye exam
- 45% has CSF analysis with results available
  - 70% had reactive VDRL

Conclusions

- Bacterial STDs are highly prevalent among MSM and increasing
- Sexual history taking is a core component of guiding recommended clinical and preventive services
- STD testing for syphilis and GC/CT (including rectal and pharyngeal sites) is essential to:
  - Identify asymptomatic infection
  - Reduce transmission
  - Identify candidates at risk for HIV acquisition and initiate on PrEP
- As STDs increase, we need to be vigilant in our efforts to reduce associated morbidity, including antibiotic-resistant gonorrhea and ocular syphilis
- HIV care settings and clinics that prescribe PrEP provide opportunities to improve STD screening and sexual health promotion among populations at risk for STDs
Clinical Guidelines and Consultation

STD Clinical Consultation Network  stdccn.org
CDC STD Control Branch
Warm line 510-620-3400

CDC STD Treatment Guidelines App
Available now, free
Search for “STD TX”

Thanks!

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Any burning questions?