Adolescent STI Update 2013

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Sexual Development

SC Data – YRBS 2011

Ever Had Sex

- Had sex for the first time at 12 or less
  - 4% of females/17% of males
- Have had 4 or more lifetime partners
  - 17% of females/26% of males

SC Data STI 2009
ages 15-19

- Chlamydia
  - Almost 11000 cases
- Gonorrhea
  - Almost 3000 cases

Sexually Transmitted Infections:
Diagnosis and Treatment

www.wonder.cdc.gov/std.html
STI Burden
- Youth aged 15-24 account for ¼ of ever-sexually active population BUT acquire ½ of all new STI
- >19 million STI cases occur in USA each year
- STIs can cause serious health problems
  - ectopic pregnancy, infertility, chronic pelvic pain
  - increased risk of HIV infection

STIs and Adolescents
- Many teens feel anyone with an STI is symptomatic
- Normal part of adolescent development to think "it won't happen to me"
- Lack of perceived access to care
  - Minors may consent to STI services in SC (mature minors 15 and under, all minors 16 and older)

CDC 2010 STD Treatment Guidelines
- Advise healthcare providers on most effective STD treatment, screening, prevention and vaccination
- Recommendations developed in consultation with public and private sector professionals knowledgeable in STD management
  - AAP, SAHM, ACOG, AMA represented
- CDC revises the Guidelines every ~3-4 years, using a scientific, evidence-based process

2010 STD Treatment Guidelines
www.cdc.gov/std/treatment/2010/

Adolescents and STDs
- Prevention
- Screening
- Treatment

Prevention
- Encourage immunizations, including HPV, HAV and HBV
- Provide information on HIV infection, testing, transmission, and implications of infection to all adolescents as part of routine health care
Prevention

- Integrate sexuality education into clinical practice
  - USPSTF recommends STD prevention behavioral counseling for all sexually active adolescents
  - HEADS assessment
    - Home
    - Education
    - Activity
    - Drugs
    - Sexuality

Screening

Screening - Chlamydia

- Annual C. trachomatis screen for all sexually active females aged ≤25 years
  - Consider screening adolescent/young adult males in clinical settings associated with high chlamydia prevalence (e.g., adolescent clinics, correctional facilities, STD clinics and YMSM)

Screening - Gonorrhea

- Annual N. gonorrhoeae screen for all at risk sexually active females
  - Females aged <25 years are highest risk for gonorrhea infection

Screening - HIV

- All persons who seek evaluation and treatment for STDs should be screened for HIV infection
- Screening should be routine, regardless of whether the patient is known or suspected to have specific behavioral risks for HIV infection
- CDC recommends HIV screening for patients aged 13–54 years in all health-care settings

Screening for Gonorrhea and Chlamydia

- Nucleic acid amplification tests (NAAT)
- May be done on cervical swabs, vaginal swabs, and urine
- Preferred specimen for females - vaginal swab
- Preferred specimen for males - urine
Vaginal Swab
- May be provider- or patient
- How to do it:
  - 1) insert the white tip of the swab about 2 inches into the vagina
  - 2) gently rotate the swab for 15-30 seconds against the sides of the vagina
  - 3) withdraw swab and insert into the orange top transport tube
  - 4) break swab at the scored line on the shaft
  - 5) recap!

Screening for Other STDs
- Routinely screening asymptomatic adolescents for certain STDs (e.g., syphilis, trichomonas, HSV, HPV, HAV, and HBV) is not recommended
  - YMSM and pregnant adolescents might require more thorough evaluation
- Cervical cancer screening should begin at 21 years

Screening for Other STDs
- Syphilis - why not draw an RPR with the HIV?
- Trichomonas - microscopy of vaginal fluid
  - 60-70% sensitivity
  - culture and NAAT available

Test for Other STDs
- HSV
  - Clinical diagnosis is both nonsensitive and nonspecific as classical painful multiple vesicular or ulcerative lesions are often absent
  - Culture sensitivity is low, especially for recurrent lesions, and declines rapidly as lesions begin to heal

Testing for Other STDs
- HSV type-specific antibodies
  - Nearly all HSV-2 infections are sexually acquired, so the presence of HSV-2 IgG implies anogenital infection
  - Type-specific HSV serologic assays might be useful in the following scenarios:
    - recurrent genital symptoms or atypical symptoms with negative HSV cultures
    - a clinical diagnosis of genital herpes without laboratory confirmation
    - a partner with genital herpes
    - persons presenting for an STD evaluation
    - persons with HIV infection
    - MSM

Treatment

Gonorrhea Treatment

- DUAL THERAPY
- Resistance remains an issue in U.S.
- Penicillin, tetracycline or quinolones are no longer options!!
- CDC recommends dual therapy for gonococcal infections at all anatomic sites
- A 250-mg dose of ceftriaxone is now recommended over a 125-mg dose

Treatment for Uncomplicated Gonorrhea Infection of the Cervix, Urethra or Rectum

**Recommended Regimens**

Ceftriaxone 250 mg IM in a single dose  
OR, if NOT AN OPTION  
Cefixime 400 mg orally in a single dose  
OR  
Single-dose injectable cephalosporin regimen  
PLUS  
Azithromycin 1g orally in a single dose  
OR  
Doxycycline 100 mg orally twice a day for 7 days

Chlamydia Treatment

- Recommended Regimens

Azithromycin 1g orally in a single dose  
OR  
Doxycycline 100 mg orally twice a day for 7 days

Pelvic Inflammatory Disease (PID) - Diagnosis

- Cervical motion tenderness
- And/or adnexal tenderness
- And/or uterine tenderness

PID Treatment - Outpatient

- Recommended Regimen
  - Ceftriaxone 250 mg IM in a single dose  
    PLUS  
    Doxycycline 100 mg orally twice a day for 14 days  
    WITH or WITHOUT  
    Metronidazole 500 mg orally twice a day for 14 days  
- Reassessment in 72 hours

PID Treatment - Inpatient

- Recommended Parenteral Regimens
  - Cefotetan 2g IV every 12 hours  
    OR  
    Cefoxitin 2 g IV every 6 hours  
    PLUS  
    Doxycycline 100 mg orally or IV every 12 hours  
    OR  
    Clindamycin 900 mg IV every 8 hours  
    PLUS  
    Gentamicin loading dose IV or IM (2 mg/kg of body weight), followed by a maintenance dose (1.5 mg/kg) every 8 hours. Single daily dosing (3-5 mg/kg) can be substituted.
Trichomonas

- Diagnosis – microscopy of vaginal secretions
- Recommended Regimens
  - Metronidazole 2 g orally in a single dose
  OR
  Tinidazole 2 g orally in a single dose

Follow up

- Partner Services
- Test of Reinfection

Partner Treatment

- Partners should be referred for evaluation, testing, and treatment if they have had sexual contact within the previous 60 days or the last partner if before that
- Expedited partner treatment (EPT)

Test of Reinfection

- High C. trachomatis, N. gonorrhoeae and T. vaginalis reinfection rates
  - treated persons resume sex with untreated partners or initiate sex with new partners
- Retest for chlamydia/gonorrhoea/trichomonas ~3 months after treatment or whenever persons next present for medical care
- Regardless if patients believe sex partners treated

Test of Cure

- Not recommended except in pregnant women
- If < 3 weeks after treatment, can have continued positive NAAT

How long to abstain?

- Patients should abstain from sexual contact until 7 days after they and their partners have completed treatment
Conclusions…

- Please talk with your adolescent patients (and parents) about sexuality - asking about it will not "make them do it"
- Remember to screen for STIs
- Condoms
- Cervical cytology screening at 21 yo
- Don't forget to vaccinate!

Questions?

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