STI UPDATE FOR THE ADVANCED PRACTICE NURSE

Amy Lee, DNP, ARNP, WHNP-BC

THE UNIVERSITY OF ALABAMA®

1

Disclosures

- *Conflicts of Interest and Disclosures: The presenter has no real or perceived vested interest that relates to this presentation.*

THE UNIVERSITY OF ALABAMA®

2

Objectives

- Discuss common sexually transmitted infections (STI's)
- Explore symptoms and sequelae of each STI
- Review updated pharmacological treatment options for each STI

THE UNIVERSITY OF ALABAMA®

3

Introduction

- ”2015 STD Treatment Guidelines” – latest guidelines
- 2021 Updates
- “Recommended Regimens” vs “Alternative Regimens”

STD 2015
Sexually Transmitted Diseases Treatment Guidelines, 2015

THE UNIVERSITY OF ALABAMA®

4

HIV
Human Immunodeficiency Virus

- Acute retroviral illness→multiyear chronic illness→life threatening immunodeficiency
- Depletes CD-4 T lymphocytes
- Culminates in AIDS: median time 11 yrs without treatment
- Early diagnosis and treatment = nearly normal lifespan

THE UNIVERSITY OF ALABAMA®

5

HIV

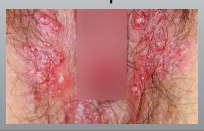
- Screen all those seeking evaluation and treatment for STIs
- Screen patients aged 13-64
- Allow for “Opt Out” rather than “Opt In”
- Do not consent separately for HIV screening
- Diagnosis: serum testing and confirmation, may have a negative window, Ag/Ab preferred
- Treatment: refer, HAART
- PrEP and PEP

THE UNIVERSITY OF ALABAMA®

6

Genital Ulcerative Disorders

- HSV – Herpes Simplex Virus
  - Chronic lifelong viral infection
  - HSV 1 (oral or anogenital) or HSV 2 (anogenital)
  - Direct PCR test of choice
  - Serum antibody testing type specific
  - Treatment: antivirals – episodic or suppressive
  - Counseling

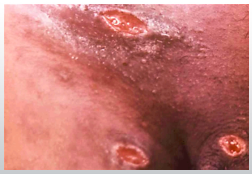


THE UNIVERSITY OF ALABAMA®

7

Genital Ulcerative Disorders

- Chancroid
  - Infection with H. Ducreyi
  - Not common in the US
  - No FDA approved PCR test
  - Probable diagnosis



Painful ulcer; lymphadenopathy; neg syphilis; neg HSV

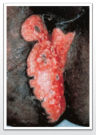
  - Treatment: antimicrobial
  - Partner treatment
  - Follow up 3-7 days

THE UNIVERSITY OF ALABAMA®

8

Genital Ulcerative Disorders

- Granuloma Inguinale
  - Infection with Klebsiella granulomatis
  - Not common in the US
  - Diagnosis through biopsy with darkfield exam
  - Treatment: antimicrobial (prolonged)
  - May relapse even after effective therapy
  - Treatment offered to partners within 60 days



THE UNIVERSITY OF ALABAMA®

9

Genital Ulcerative Disorders

- Lymphogranuloma venereum
  - Infection with C trachomatis serovars L1, L2, or L3
  - Most common presenting s/s tender unilateral lymphadenopathy; may also present with proctocolitis
  - Diagnosis through exclusion, CT NAAT of rectum effective but not FDA approved
  - Treatment: antimicrobial (prolonged)
  - Partner treatment (60 days) for chlamydia

10

Syphilis

- Infection with T pallidum
- Primary, secondary, tertiary, latent
- Serum testing with confirmation (non treponemal and treponemal)
- Antibody titers indicate treatment response and reinfection
- Treatment: antimicrobial, reeval 6-12 months
- Partner treatment (90 days)*

11

Urethritis and Cervicitis

- NGU and Cervicitis
  - May be caused by a variety of etiologies
    - Consider GC, CT, Trich, Mycoplasma, Ureaplasma
  - Treat identified etiology OR cover for GC/CT
  - Partner evaluation
  - Follow up for recurrent or persistent s/s

12

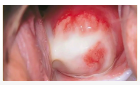
Urethritis and Cervicitis

- Mycoplasma Genitalium
  - Found in a certain amount of urethritis, cervicitis, and PID cases
  - Commonly asymptomatic
  - Currently no FDA approved test but NAAT testing is available
  - Routine screening not recommended
  - Consider in cases non-responsive to treatment
  - Treatment: antimicrobial but limited

13

Urethritis and Cervicitis

- Chlamydia

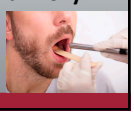


  - Infection with *C trachomatis*
  - May cause infertility, ectopic pregnancy, PID
  - Most frequently reported ID in the US
  - Asymptomatic infection is common
  - Annual screening of all women < 25 and at risk
  - Diagnosis: NAAT (vaginal, urine) (oral, rectal*)
  - Treatment: antimicrobial
  - Partner treatment, retesting in 3 months

14

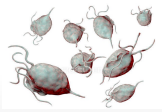
Urethritis and Cervicitis

- Gonorrhea
  - Infection with *N gonorrhoeae*
  - May cause infertility, ectopic pregnancy, PID
  - Most frequently reported ID in the US
  - Asymptomatic infection is common
  - Annual screening of all women < 25 and at risk
  - Diagnosis: NAAT (vaginal, urine) (oral, rectal*)
  - Treatment: antimicrobial (dual therapy with **Doxy** ONLY if CT results are unknown)
  - Partner treatment, retesting in 3 months



15

Vaginitis



- Trichomoniasis
  - Infection with *T vaginalis*
  - More common in Black women, women ≥ 40, incarcerated women and men
  - Commonly asymptomatic
  - Increases risk of PID, HIV, and preterm birth
  - Screen all women with vaginal discharge
  - NAAT screening recommended, wet prep common but has low specificity
  - Treatment: Nitroimidazoles
  - Partner treatment, Retesting in 3 months

16

Vaginitis

- Bacterial Vaginosis*
  - Polymicrobial clinical syndrome
  - Lactobacillus replaced with high concentrations of anaerobes
  - Cause is not fully understood
  - Increases risk of STI acquisition, pregnancy complications, and GYN surgical complications
  - Diagnosis: pH > 4.5, clue cells, discharge, whiff
  - Treatment: antimicrobial, frequently recurs
  - Partner treatment not recommended

17

Vaginitis

- Vaginal Candidiasis*
  - Most often caused by *C Albicans*
  - Diagnosis symptomatically and through wet prep
  - May use culture for + s/s with neg wet prep or for non-responsive cases
  - Treatment: antifungal (vaginal or oral)
  - Consider immunocompromise in non-responsive or frequently recurrent
  - Partner treatment not advised

18

HPV – Human Papilloma Virus

- Approximately 100 subtypes, 40 genital
- Most sexually active will be infected at least once – generally asymptomatic and self limiting
- Oncogenic subtypes=penile, cervical, vulvar, vaginal, anal, oropharyngeal cancer/precancer
- Non-oncogenic subtypes=genital warts and respiratory papillomatosis
- Prevention: vaccination, barriers, sex contacts
- Treatment: screening, targeted removal

19

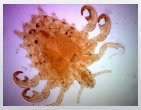
Hepatitis

- Hepatitis A
  - Fecal Oral Route, Viral
  - Vaccination, post Exposure, supportive treatment
- Hepatitis B
  - Blood and body fluid, Viral
  - Vaccination, post exposure, supportive treatment
- Hepatitis C
  - Blood and body fluid, Viral
  - Recent significant advances in treatment have resulted in cure, refer for treatment evaluation

20

Ectoparasitic

- Pediculosis Pubis
  - Pubic lice
  - Visible lice or nits in the pubic hair
  - Treatment: Pediculcides
  - Reevaluate in 1 week
  - Retreat if necessary
  - Decontamination of bedding and clothing



21

Ectoparasitic

- Scabies
  - Infestation with *S. scabiei*
  - In adults, frequently sexually acquired
  - Treatment: Pediculcides
  - Retreat if s/s persist 2 weeks after treatment
  - Decontamination of bedding/clothing
  - Persons with close contact within 1 month should be evaluated

22

PID
Pelvic Inflammatory Disease

- Spectrum of inflammatory d/o of the upper genital tract
- May be CT/GC associated or polymicrobial from the genital tract
- Diagnosis may be made in the sexually active with pelvic pain and ONE or more:
  - CMT
  - uterine tenderness
  - adnexal tenderness

23

PID

- Diagnosis support:
  - temperature >101°F, cervical mucopurulent discharge or friability, WBCs on wet prep, elevated sed rate, elevated C-reactive protein, + CT/GC
  - No WBCs on wet prep=PID unlikely
- Diagnosis confirmation:
  - EMB, US or MRI evidence of TOA or salpingitis, laparoscopy
- Treatment: antimicrobial (parenteral/enteral)
- Criteria for admission, partner treatment, f/u

24

Special Populations

- Pregnant Women
  - Screening recommendations
- Adolescents
  - Screening recs, consent, prevention/vaccination
- MSM
  - HIV, HPV, Hep A/B/C risk, prevention/vaccination
- WSW
  - STI risk and screening, prevention
- Transgender Men and Women
  - HIV rates, identity barriers to care

25

Prevention

- Accurate risk assessment and education
- Barrier methods
- Vaccination
- Effective treatment including partner treatment, retesting
- PrEp and PEP
- Suppressive therapy
- EPT

26

Conclusion

- STIs can be life threatening or debilitating or even morally/socially destructive
- Prevention is priority
- Aggressively identify and treat
- Follow up as indicated
- Always be non-judgmental
- Refer assault and abuse to SANE facility and any other supportive resources

27

References

- Centers for Disease Control and Prevention. (2021). *2015 Sexually transmitted diseases treatment guidelines. https://www.cdc.gov/std/tg2015/default.htm*