AETC AIDS Education & Training Center Program Mountain West

STI Treatment Guidelines Update

Part 1: Syphilis (and BV + Trich)

Chase Cannon
Acting Assistant Professor
University of Washington

Last Updated: 6 Sep 2021

echo

Disclosures

No conflicts of interest or financial relationships to disclose.

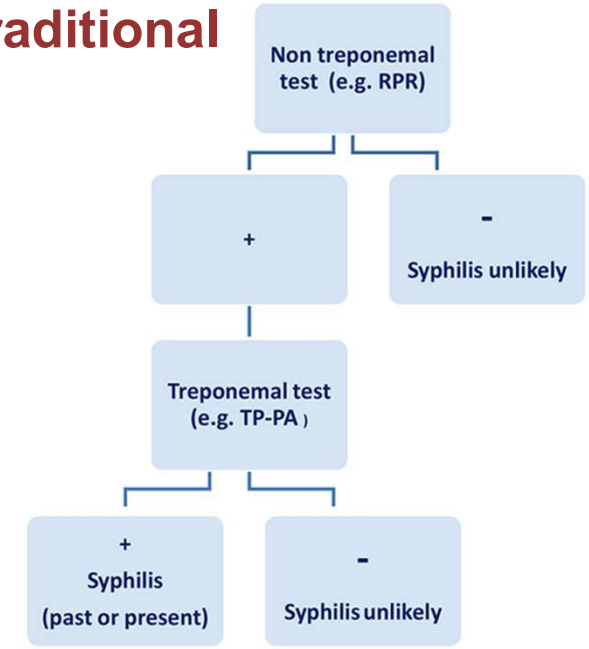
2021 CDC STI Treatment Guidelines

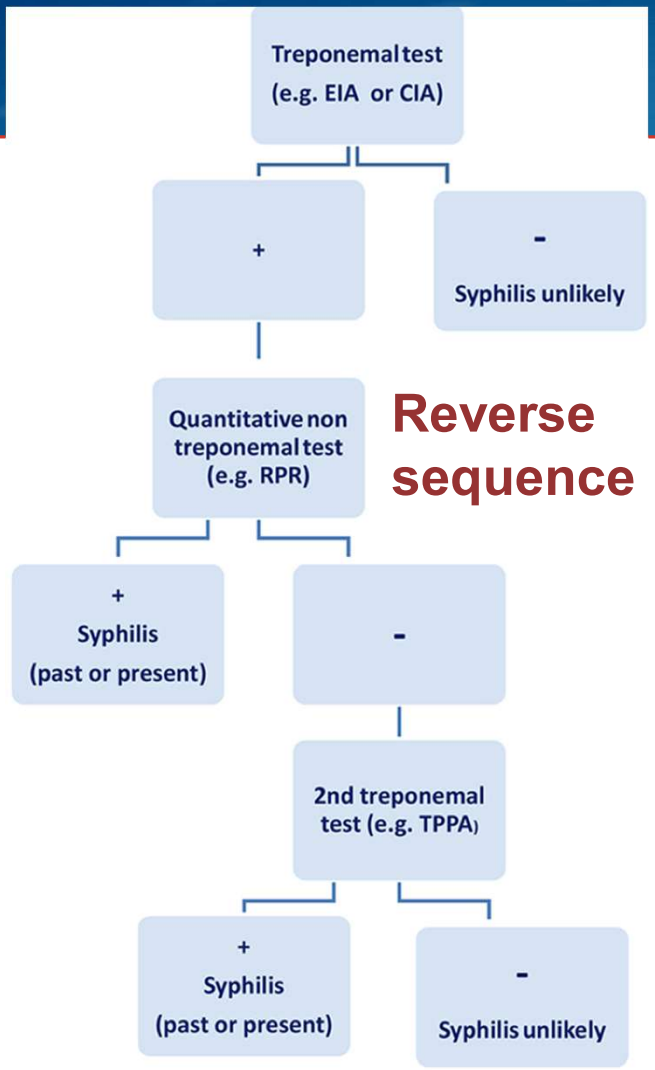
- Experts convened in Atlanta, GA from 11-14 June 2019
- Incorporation of new data/evidence
- More focus on challenges in syphilis management
  - Enhanced discussion about algorithms
  - Ocular syphilis
  - CSF follow-up
  - Expanded risk factors for testing in pregnant people
- Updates to BV and Trichomonas treatment

MWAETC

Syphilis algorithms

Traditional





Reverse sequence

Morshed MG, Clin Vaccine Immunol 2015

MWAETC

Syphilis algorithms

Traditional

- Always best to use same NTT from same lab, if possible
- RPR titers are often higher than VDRL
- Serofastness: inadequate serologic response vs serologic non-reversion

Reverse sequence

- If treated during primary stage,15-25% of TT may serorevert in 2-3 years[1]
- Tiebreaker: use TP-PA or TT with different antigen target than initial used for screening
  - If positive: repeat NTT in 2-4 weeks with H&P to evaluate for early infection
- EIA/CIA optic density cutoffs may predict TP-PA positivity[2]

(1) Romanowski et al, Ann Int Med 1997; (2) Berry GJ et al, STD 2016

MWAETC

CSF evaluation in neuro-, ocular and otosyphilis

- Can occur at any stage of syphilis; commonly identified in early stage
- *May or may not* involve CNS
- If *isolated* ocular sx that are *confirmed* on exam + *reactive* serology = **CSF is *unnecessary* before treatment**
- CSF may be helpful if ocular sx + reactive serology and no abnormal exam

Panuveitis, retinal vasculitis, CN II-VI dysfunction, etc.

CSF evaluation in neuro-, ocular and otosyphilis

Otosyphilis

- If *isolated* auditory abnormalities + *reactive* serology, ***CSF is*** almost always normal and ***not of any additional diagnostic benefit***

CSF analyses

- VDRL is very specific (~100%), not very sensitive (~25-30%)[1]
  - Negative doesn't rule out but positive means highly likely to be neurosyphilis
- FTA-ABS is not very specific (55-60%), but highly sensitive (95-100%)[2,3]
  - If negative, very unlikely to be neurosyphilis
- TP-PA: sensitivity and specificity are similar to FTA-ABS[2]

(1) Davis LE et al, Ann Neurol 1989; (2) Marra CM, CROI 2016, Abstract 767; (3) Marra CM, Neurol 2004;63

MWAETC

CSF evaluation in neuro-, ocular and otosyphilis

For those who are immunocompetent or who have HIV and on effective ART, normalization* of the serum RPR titer predicts normalization of CSF parameters after NS tx.

Repeat CSF exams not necessary in setting of serologic and clinical response to therapy.

* 4-fold decrease or reversion to nonreactive vs >8-fold decrease in serum RPR

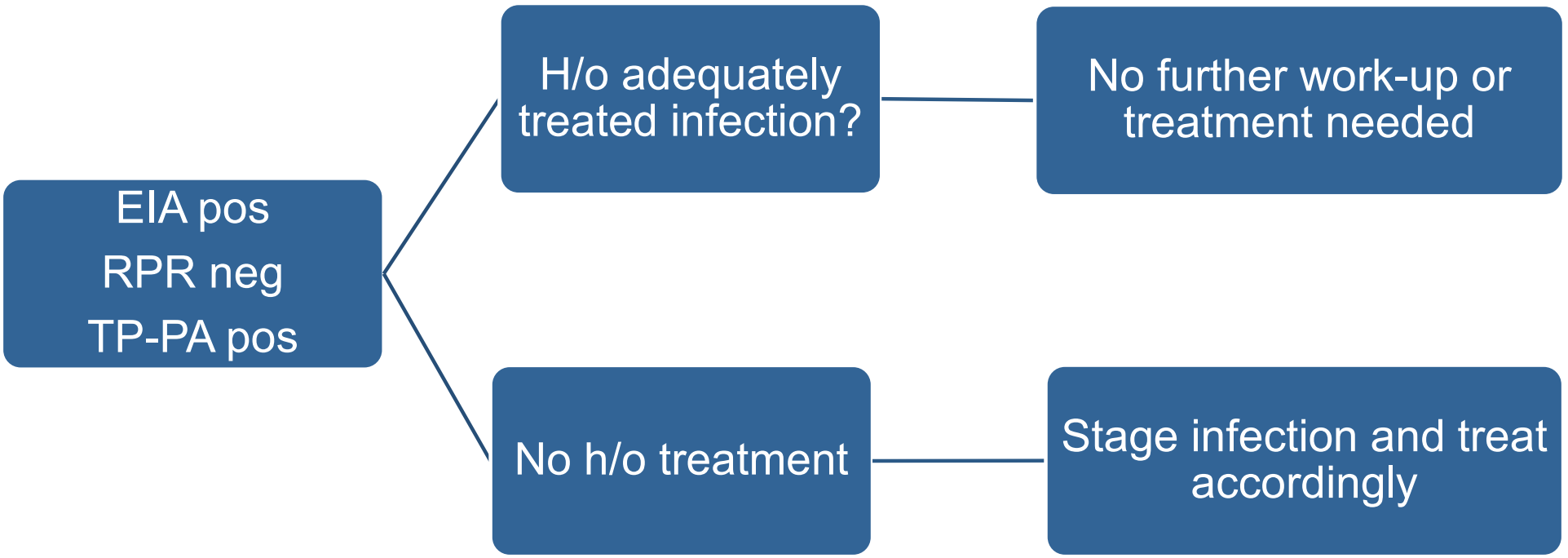
MWAETC

Syphilis in pregnancy

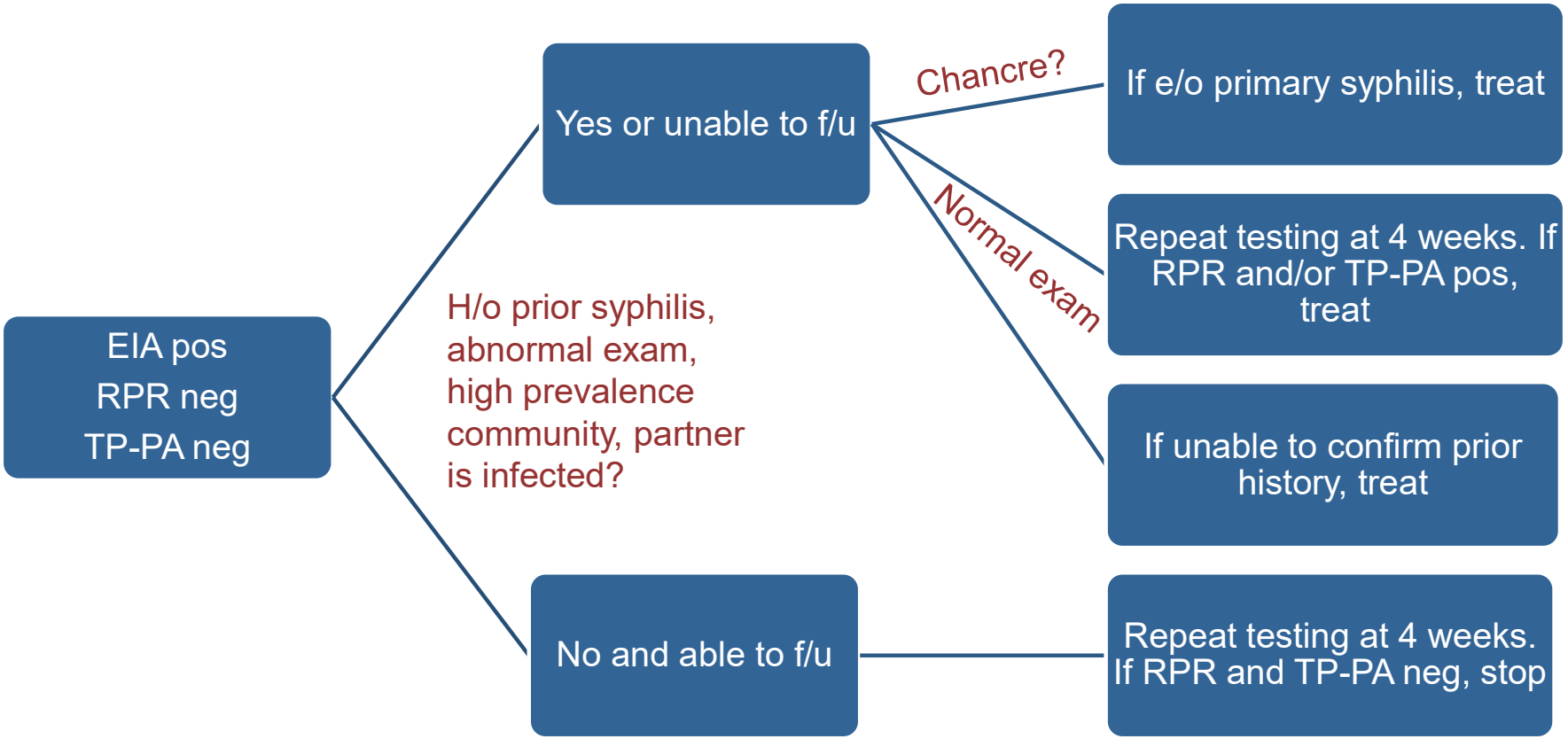
- Optimal timing between doses for LL/UD syphilis is 7 days; up to 9 days may be permitted
- Specified risk factors:
  - Sex with multiple partners
  - Transactional sex or sex + drug use
  - Late entry into prenatal care (first visit in 2nd trimester or later)
  - No prenatal care
  - Meth or heroin use
  - Incarceration of pregnant individual or their partner
  - Unstable housing or homelessness
- Evaluate for ongoing risk factors and treat sex partners

MWAETC

Syphilis in pregnancy: management tree



Syphilis in pregnancy: management tree



MWAETC

Miscellaneous syphilis pearls

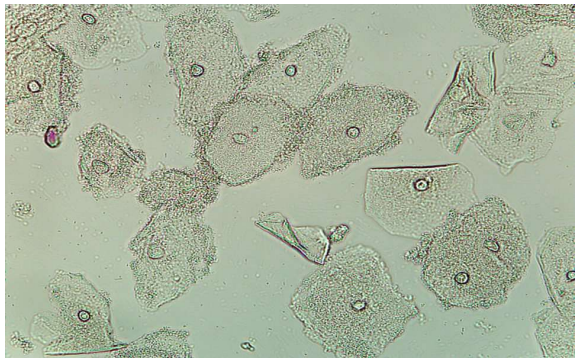
- Primary syphilis can be multiple, atypical or painful lesions[1]
- Longer tx for latent stage: *T. pallidum* thought to hide and divide slowly in sequestered sites
- No evidence that steroids improve outcomes for ocular or otosyphilis
- Ok to consider giving 1-3 weeks of BPG IM after finishing NS tx
- No evidence that antipyretics prevent Jarisch-Herxheimer rxn
- If syphilis diagnosed and treated…
  - Before/at 24 weeks EGA: soonest to repeat titers is 8 weeks after tx
  - After 24 weeks EGA: repeat titers at delivery
- For serofast persons without HIV, retreatment does not meaningfully change serologies[2]

(1) Towns JM et al, STI 2016; (2) Zhang X et al, STD 2021

MWAETC

Bacterial vaginosis

- Removed warning about disulfiram-like reaction with nitroimidazoles
- Recommended therapy:
  - Metronidazole 500 mg PO bid x7d
  - *Metro gel 0.75%, give 1 full intravaginal application (5 gm) daily x 5d*
  - *Clindamycin cream 2%, give 1 full intravaginal application (5 gm) qhs x7d*
- Alternative therapies: Four prior regimens remain; *addition of secnidazole 2 gm oral granules in a single dose* (sprinkle on soft food before ingesting and drink full glass of water after to help with swallowing)



MWAETC

Trichomoniasis

- Change to tx for women
- No data for extended tx regimens in men
- Revised recommendations for persistent infection; contact CDC for resistance testing

2015

Group	Rec.	Alt.
Women (HIV-negative) and men?	MTZ 2 gm PO x1 or tinidazole 2 gm PO x1	MTZ 500 mg PO bid x7d
Women (HIV-positive)	MTZ 500 mg PO bid x7d	

2021

Group	Rec.	Alt.	Persistence
All women	MTZ 500 mg PO bid x7d	Tinidazole 2 gm PO x1	• Re-exposed: Repeat same • Not re-exposed: MTZ or tinidazole 2 gm PO x7d
Men	MTZ 2 gm PO x1		• Re-exposed: Repeat same • Not re-exposed: MTZ 500 mg PO bid x7d

MWAETC

Acknowledgment

The Mountain West AIDS Education and Training (MWAETC) program is supported by the Health Resources and Services Administration (HRSA) of the U.S. Department of Health and Human Services (HHS) as part of an award totaling $2,886,754 with 0% financed with non-governmental sources.

AETC AIDS Education & Training Center Program
Mountain West