Requisite Evaluation-Initial Intake
The Newly diagnosed HIV: STDs

- CD4 lymph count
- HIV-1 RNA by PCR quant
  - Quest vs LabCorp?
- STD screen: not ordered on basis of symptoms
  - Syphilis RPR or VDRL titer and confirm w TPPA
    “quantitative results from the two tests cannot be compared directly because RPR titers are slightly higher than VDRL.”
  -- Key historical info to evaluate a positive titer
    Date of first diagnosis / RPR titer / Tx 1 vs. 3 shots / f/u titer
    - Symptoms: chancre / rash / oral ulcers / eye and CNS
    - GC / Chlamydia: NAA 1st void urine or APTIMA® Unisex Swab
Expected lab Abnormalities- RPR+ titer

- Majority HIV pts screened w + RPR titer will be asymptomatic
  - Challenges are 3 fold
    - Knowledge of protean symptoms / clinical clues for 2ndary dz
    - Establishment of early vs late latent syphilis
      - 1 vs 3 injections of benzathine penicillin
    - Recognizing potential CNS syphilis
      - CSF sampling and IV therapy
- Low level titers 1:2 are common upon baseline intake
  - Be aware of “serofast” state: establish prior Tx history
    - persistence of a reactive non-treponemal state
      - usually 1:16 or less
      - variation no greater than 1 to 2 dilutions over time
Syphilis and HIV: Unique features

- Non-treponemal serology for diagnosis is similar to non-HIV
  - Slight tendency for false negative serology in primary disease
    - Prozone phenomenon: usually 2ndary stages
  - Tendency towards a slower and lower decline w therapy
    - “serofast” state: detectable titer after 4 fold drop
  - Reports of biologic false positives (+RPR / Neg TPPA)
    - associated with hepC infection (20% of HIV pts)
RPR titers in HIV

• Following TX for syphilis: do f/u RPR titers at:
  – 3, 6, 9, 12 / 24 months: primary to early latent stages
  – 6, 12, 18 and 24 months for late latent and greater / CNS

• For CNS syphilis, fair correlation w serum RPR titers
  – F/u exams of CSF are problematic: cost and acceptance
    – Clearance of pleocystosis
    – Clearance of CSF VDRL
Stages of Syphilis

• **Primary**
  - Key: painless genital ulcer (Chancre)
  - Mean of 3 weeks from exposure

• **Secondary**
  - Key: clinical symptomology and physical findings
  - Mean 4-10 weeks

• **Latent (lacking symptoms or signs)**
  - Early: less than a year in duration
  - Late: Greater than a year in duration
    - “Syphilis of unknown duration”

• **Tertiary (a term for history aficionados)**
  - Non-infectious stage after decades of untreated dz
    - Gumma / Tabes dorsalis / Cardiovascular
Snails track from syphilis
Desquamation of skin from secondary syphilis
Papules of secondary syphilis
Condyloma lata of secondary syphilis
1. Visual complaints (especially unilateral) in HIV infected patients should prompt consideration of ocular syphilis

- Symptoms: blurred vision, loss of vision, central scotomas
- **Anterior chamber: photophobia, irreg pupil, red eye**
- Posterior chamber uveitis is typical, but retinitis, retinal detachment, CSF inflammation also possible
Anterior Uveitis
Anterior Uveitis w Pupillary Involvement
2. Neurologic complaints in HIV infected patients should prompt consideration of neurosyphilis

- **Symptoms: key area**
  - Vision / hearing / facial and eye muscle strength

- **Early forms of neurosyphilis are most common**
  - Acute syphilitic meningitis (CN VI, VII, VIII)
  - Meningovascular (stuttering stroke)
    - Speech (aphasia) and contra-lateral weakness