The Great Pretender Comes to Ward 86

Mark Jacobson

- 49 y.o. GWM. HIV diagnosed 1989.
- AZT/3TC/Ind in 1997-8; stopped because of intolerance to IDV. ddI/d4T/DLV/NFV 2000-1. CBV/Kaletra 2003-4. Now off ARV x 1 year.
- Current CD4 = 101, VL>500,000
- PMHx: Psoriasis, HCV, HBV

- 7/7/05- Faint maculopapular rash trunk, extremities. Red raised lesions on soles and palms. Admited recent unprotected insertive and receptive anal sex.
- RPR+ 1/1024.
- 7/14/05- Benzathine penicillin.

- 10/10/05: Drop-in Clinic, c/o 3 weeks of R-sided tinnitus, ear pain, hearing loss.
 Woke this a.m. with R facial paralysis.
- PE- dense R facial paralysis, cannot close R eyelids, effacement R forehead wrinkles, decreased R-sided hearing, psoriatic rash.
- RPR- 1/16
- Rx- Valacyclovir, artificial tears, TAC.

- 10/28/05: Returns to Drop-In Clinic
- c/o new dysphagia, L hand weakness, unsteady balance and headache in last week. No improvement in facial paralysis. Hearing loss worse.
- PE: dense R facial paralysis, dysphagia for liquids, deviation of uvula to L, 4/5 L hand strength, ataxic tandem gait, complete R hearing loss. Neck supple.

- 10/28/05: Admitted to Neurology Service.
- Stat Head CT w/o contrast: WNL
- LP: WBC- 193 (90% lymphs), RBC- 3, protein- 177, glucose 44 CSF/98 blood.
- Rx: IV ceftriaxone, ampicillin, vancomycin. IV acyclovir added next day.

- Serum RPR- 1/1024
- CSF VDRL- 1/32
- Head MRI- 7 mm enhancing mass R internal auditory canal, abnormal enhancement R VII and bilateral III and V cranial nerves.
- Rx- IV penicillin
- After one week dysphagia and L hand weakness resolved; no improvement VII/VIII N dysfunction.

- 11/2/04: First clinic visit for 39 yo bisexual M dx HIV 2001. No ARV Rx. Recent CD4=434. Recurrent perianal HSV. No IDU, occ binge EtOH. Main complaint is fatigue.
- PE- Hairy leukoplakia. Skin, Abd WNL.
- ALT=169, AST=99, Alk phos=141 (normal LFT's in 7/04). HBsAg-, HBsAb+, HCV Ab-, HAV Ab-.

- RPR+ 1/128
- 11/29/04: Recalls unsafe sex in 9/04 followed by self-limited febrile illness in 10/04 without rash or genital lesions.
- Hx of PCN severe rash beginning 24 hr after dosing and intolerant of doxycycline
- Rx: CFTX 1 gm IM every other day x 4 doses
- 2/23/05: LFT's WNL.

- 42 y.o. G Asian M, hx methamph abuse and bipolar disorder. Hx of virologic failure on multiple meds but CD4 >400 and VL UD x 1 yr on d4T/3TC/TDF/LPV.
- 6/05: Switched to AZT/3TC/TDF/LPV due to lipoatrophy concerns.
- 8/17/05: Lamotrigine added for BPD.
- 9/28/05: Lipoatrophy progressing. Switch to ABV/3TC/TDF/LPV.

- 10/10/05: Drop-in Clinic c/o non-pruritic rash that began 9 days ago with a few days of malaise/low grade fever now resolved. Admits to unsafe sex several months ago. Hx of remote syphilis; serofast with RPR 1:1.
- PE: papular eruption trunk, arms and L palm.

- Ddx: ABV reaction, lamotrigine reaction, secondary syphilis.
- Management: ABV continued.
 RPR obtained --> + 1/64.
- 10/12/05: Rx benzathine PCN.

SYPHILIS: The Great Pretender

"There is no organ in the body, nor any tissue in the organs, which syphilis does not invade: and it is therefore manifestly difficult to speak, at least at all concisely, of the pathology of the disease; just as it is almost impossible to describe its clinical symptoms without mentioning almost every symptom of every disease known."

Syphilis more infectious than HIV

- Rate of syphilis acquisition from an infected sex partner is 30%.
- Based on placebo-controlled study of antibiotic efficacy in aborting transmission (30% infection rate in known sexual contacts, within 30 days, of patients with confirmed primary or secondary syphilis assigned to placebo).

- Skin (90%)
 - -Rash
 - Macular
 - Maculopapular
 - Papular
 - Pustular
 - Condylomata Lata (intertriginous plaques)









- Oral (35%)
 - Mucous patch (silvery erosion, red periphery)
 - Aphthous ulcers
- Genital (20%)
 - -Chancre
 - Condylomata lata
 - -Mucous patch



- Constitutional (70%)
 - Lymphadenopathy
 - -Fever
 - -Malaise, anorexia
 - -Pharyngitis, laryngitis
 - Arthralgias

CNS

- Asymptomatic (8-40%): Abnormal CSF
 WBC and protein, +/- CSF VDRL
- Symptomatic (1-2%)
 - Meningitis
 - Ocular: uveitis, retinitis, vasculitis
 - Cranial Nerve (II-VIII): tinnitus, vertigo, hearing loss, facial weakness, EOM palsy.

How rare is Bell's palsy as a complication of 2° syphilis?

- Medline search of syphilis and Bell's palsy revealed only 3 cases reported in the last 30 years.
 - Keane JR. Neurology 1994;44:1198-202
 - David LE, Sperry S. Ann Neurol 1978;4:378-80.

- Rare
 - -Glomerulonephritis
 - Nephrotic syndrome
 - -Hepatitis
 - -Arthritis
 - Periosteitis

Neurosyphilis: Active vs. Quiescent

- Presence of abnormal CSF WBC and protein may differentiate, but problematic in HIV with >200 CD4 cells.
- +CSF VDRL with normal CSF WBC and protein may be "burned out" quiescent neurosyphilis.
- Does quiescent mean resolved?
- Need to Rx "burned out" neurosyphilis with IV PCN?

Neurosyphilis: Asymptomatic vs. Symptomatic

- Both generally have abnormal CSF WBC and protein. Clinical findings differentiate.
- CSF VDRL may be falsely negative in up to 25%.
- Lukehart et al recovered T. pallidum from 30% of 40 pts with 1° or 2° syphilis and no CSF abnormalities. (Ann Int Med 1988;109:885-62).

Neurosyphilis: 1°, 2°, latent

- 1° syphilis: 10-20% of patients have abnormal CSF WBC and protein.
- 2º syphilis: 8-40% of patients have abnormal CSF WBC and protein, but only 1-2% have symptomatic disease (e.g., meningitis, ocular, CN).
- Latent syphilis: 10-30% abnormal CSF.
- Abnormal CSF → increased risk of symptomatic neurosyphilis.

3º Neurosyphilis

- Meningovascular: usually 4-7 yrs after infection. Clinically presents with stroke.
- Parenchymatous: usually decades after infection
 - Tabes dorsalis: sensory ataxia, lightning pains, autonomic dysfunction.
 - General paresis: dementia
- Optic atrophy: decades after infection.