Syphilis

Dr Andy Williams
Consultant in Sexual Health & HIV
Barts Health NHS Trust
Number of STI diagnoses among women: England, 2008 to 2017

- Data from specialist and non-specialist SHS (GUMCAD returns)
- Chlamydia data excluded due to high numbers
- Data type: service data

Total number of chlamydia diagnoses among women: England, 2008 to 2017

- Data from specialist and non-specialist SHS (GUMCAD and CTAD returns)
- Chlamydia data from 2012 onwards are not comparable to data from previous years (please see ‘Notes’ slide for more details)
- Data type: service data

Number of STI diagnoses among men: England, 2008 to 2017

- Data from specialist and non-specialist SHS (GUMCAD returns)
- Chlamydia data excluded due to high numbers
- Data type: service data
Total number of chlamydia diagnoses among men: England, 2008 to 2017

- Data from specialist and non-specialist SHS (GUMCAD and CTAD returns)
- Chlamydia data from 2012 onwards are not comparable to data from previous years (please see ‘Notes’ slide for more details)
- Data type: service data


- Data from routine GUM clinic returns.
- Data type: service data
Number of syphilis (primary, secondary and early latent) diagnoses by gender: England, 2008 to 2017

- Data from specialist and non-specialist SHS GUMCAD returns
- Data type: service data

Rates of syphilis (primary, secondary & early latent) diagnoses by gender and age: England, 2017

- Data from specialist and non-specialist SHS (GUMCAD returns)
- CNS Census mid-year 2016 estimates used for denominators
- Data type: service data
Number of syphilis (primary, secondary and early latent) diagnoses by sexual risk: England, 2013 to 2017

- Data from specialist and non-specialist SHS (GUMCAD returns)
- Data type: service data

Number of selected STI diagnoses among MSM: England, 2012

- Data from routine GUM clinic returns.
- * First episode; ** Non-Specific Genital Infection
- *** Includes diagnoses of primary, secondary and early latent syphilis
- Data type: service data
Number of STI diagnoses among MSM: England, 2008-2017

- New HIV diagnoses sourced from the HIV and AIDS Reporting System (HARS; 2017 data unavailable at time of publication). All other data from specialist and non-specialist SHS (GUMCAD returns).
- *First episode; **Includes diagnoses of primary, secondary and early latent syphilis.
- Chlamydia data from 2012 onwards are not comparable to data from previous years (please see ‘Notes’ slide for more details).
- Data type: service data.

Number of STI diagnoses among MSM by HIV status: England, 2017

- Data from specialist and non-specialist SHS (GUMCAD returns).
- Percentages represent the proportion of STI diagnoses that were made in MSM known to be HIV positive.
- *First episode; **Includes diagnoses of primary, secondary & early latent syphilis.
- Data type: service data.

Great Mimics – Sir William Osler 1897

“Know syphilis in all their manifestations & relations, & all other things clinical will be added unto you”
Syphilis: Classification

**ACQUIRED:**
- Primary
- Secondary
- Latent: Early
  - Late
- Tertiary: Gumma
  (Quartenary): CVS
  CNS

**CONGENITAL:**
- Early
- Latent
- Late + Stigmata

Primary Syphilis

- Genital - 90%

- Extragenital - 10%

- Chancre: Classical 40%
  Non-classical 60%
Can syphilitic chancre be painful?

- Yes - 35%
- Misdiagnosed as Primary Herpes

Can syphilitic rash be itchy?

- Yes- 10-13%
- Maybe more common with black skin

Chapel et al. STD 1980;7:151-4
Tertiary Syphilis: Classification

1. Gummatous/ Benign tertiary syphilis

2. Cardiovascular syphilis: Aortic arch/valve

3. Neurosyphilis: Asymptomatic
   - Meningovascular
   - General paresis
   - Tabes dorsalis
Congenital Syphilis: Classification

Early
Latent
Late
Stigmata
Hutchinson’s Triad

1. Interstitial keratitis

2. Hutchinson’s incisors

3. Deafness
Syphilis & HIV : Great Mimics

• Mimic each other
• Mimic other diseases
• Co-infection

Primary Syphilis is more severe in HIV infection

• Multiple lesions:
  – 87% vs 62% (p=0.02)
• Deep:
  – 64% vs 44% (ns)
• Larger:
  – 505mm vs 109mm (p=0.06)

*Rompalo AM et al. Sex Transm Dis 2001; 28: 448-54*

• Keratoderma, ‘Malignant syphilis’
Complicated Secondary Syphilis in HIV infection 1

• Co-existing genital ulcers 13% vs 2% (p<0.01)
  Rompalo AM et al. Sex Transm Dis, 2001; 28(8): 448-54

• Ocular involvement
  — uveitis, choroidoretinitis, optic neuritis, scleritis, papillitis, vitreitis
  Levy JH et al. Retina 1989;9:175
  hivinsite.ucsf.edu. 2002 & others

Complicated Secondary Syphilis in HIV infection 2

Rapid Progression:

• Early neurosyphilis: meningitis, cranial nerve palsies, spastic paraparesis
• Late neurosyphilis: meningovascular, tabes, dementia
  John DR et al. NEJM1987;316:1569
  Berry CD et al. NEJM 1987;316:1587
  O’Mahony C et al. Int J STD & AIDS 1997;8:275 & others
Other late Syphilitic Complications in HIV

• Cardiovascular syphilis
  
  Maharajan M et al. Sex Transm Infec2005;81:361

• Gumma
  

Alteration of the natural history of neurosyphilis by concurrent infection with HIV.

• 2 meningovascular syphilis
• 1 acute syphilitic meningitis
• 1 asymptomatic neurosyphilis
3 Points

1. Any anogenital ulcer is syphilitic or herpetic unless proven otherwise

2. Chancre can be painful

3. Syphilitic rash can be itchy