Syphilis and Hepatitis B

Vertical transmission and the central role of GPs in diagnosis, treatment and prevention

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Syphilis is not history

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Syphilis – challenges in general practice



- Syphilis is frequently not on our radar
- Clinical presentation
- Interpreting serology
- What new diagnostic tests are available?
- Getting expert advice
- Treatment
- Notifying obligations
- Contact tracing
- Specific considerations e.g. pregnancy
- Other STIs

Syphilis – A rich history that is <u>not</u> history

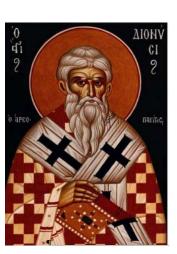
Rates of infectious syphilis in women and congenital syphilis are increasing

Syphilis cases in Victoria have been **steadily rising** over the past decade.

- Annual infectious syphilis notifications are about 5x more than 10 years ago
- Annual infectious syphilis case notifications have almost doubled in females in Victoria in the past five years
- **52% of syphilis notifications** from **Mildura** since 2017 have been in women (compared to 11% statewide)

Particularly concerning is the re-emergence of **congenital syphilis** in 2017, with 11 cases in Victoria since then.

- Among the 11 cases of congenital syphilis, four were stillbirths and five had complications of syphilis infection at birth
- Congenital syphilis can have severe consequences for unborn and newborn babies and is entirely preventable



What can GPs do about this? – screening

All sexually active people

- Routinely screen
- Refer to relevant sexual health guidelines:
 - Australian STI Management Guidelines for Use in Primary Care www.sti.guidelines.org.au
 - Melbourne Sexual Health Centre: www.mshc.org.au/health-professionals/testing-guidelines

Patient	Tests
Men who have sex with men (MSM) (cisgender)	Swabs can be self collected. Always encourage MSM to have anal swabs as asymptomatic rectal gonorrhoea and chiamydia are common. • First pass urine: chiamydia and gonorrhoea PCR • Serology: HIV, syphilis, Hep A & B. Add Hep C if injecting drug user • Rectal swab: chiamydia and gonorrhoea PCR • Throat swab: chiamydia and gonorrhoea PCR
Men who have sex with women (cisgender)	First pass urine: chlamydia and gonorrhoea PCR Serology: HIV, syphilis, Hep B. Add Hep C if injecting drug user
Women (cisgender)	Self collected high vaginal swab can be done instead of first pass urine. • First pass urine: chlamydia and gonorrhoea PCR • Serology: HIV, syphilis, Hep B. Add Hep C if injecting drug user
Transgender men	Ask about sexual behaviour a rectal swabs are recommend • First pass urine: chlamyd

Pregnant women

- Antenatal guidelines recommend screening all pregnant women for syphilis at the start of pregnancy
- If at high risk of syphilis infection, repeat screening later in pregnancy again
 - **E.g. in Mildura region,** recommendations are: Repeat screening at 28 to 32 weeks, and again at delivery for all pregnant women (i.e., screen 3x during pregnancy)
- Antenatal screening guidelines: Australian Government Department of Health. Pregnancy Care Guidelines, https://www.health.gov.au/resources/pregnancy-care-guidelines/part-f-routine-maternal-health-tests/syphilis#362-syphilis-testing

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What to do if you have a positive result

1. Give treatment

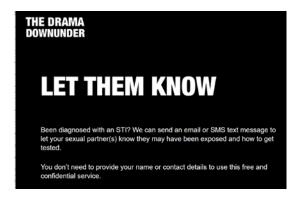
2. Notify the Department of Health

• Fill out the Department of Health syphilis notification form with **as much information as possible** (https://www2.health.vic.gov.au/public-health/infectious-diseases/notify-condition-now)

3. Contact tracing and partner notification

- For positive cases, you must test AND treat (don't wait for results) their sexual partners
 - You may need to consider testing and treating children
- For assistance with partner notification, contact the Department of Health partner notification officers (PNOs) on 03 9096 3367 or contact.tracers@health.vic.gov.au
- Partner notification tools are also available at:
 - Let Them Know: https://letthemknow.org.au/
 - The Drama Downunder: https://www.thedramadownunder.info/let-them-know/

4. Ensure they have a full STI screen



Primary syphilis = Chancre

- Ulcer
 - Often painless (but can be painful)
 - Indurated lesion
 - May not be noticed by patient if in mouth, anus, vagina, or cervix
- DO PCR swab of the ulcer for syphilis + HSV multiplex
- DO serology BUT it may be negative in early cases, so repeat
- Reference labs e.g., Melbourne Sexual Health Centre have dark field microscopy available



Secondary syphilis – not always typical

A myriad of dermatological presentations















Untreated syphilis in pregnancy

Risk of maternal damage

 One third of untreated patients with latent infection will develop symptomatic late syphilis

Risk of congenital syphilis -> foetal damage, including stillbirth

- Infection can occur at any gestation
- Primary and secondary syphilis infection results in 100% risk of transmission to the foetus.
- Foetal damage that can occur in congenital syphilis:
 - Hepato -splenomegaly, osteochondritis, periostitis,
 - Jaundice, purpura, lymphadenopathy,
 - Hydrops, myocarditis, rhinitis, pneumonia
 - Stillbirth



Interpreting positive syphilis results and management can be confusing

Specific serology tests: TPHA TPPA, FTA Ab, EIA

Used in screening

Non Specific tests: RPR VDRL

Used in monitoring treatment



If uncertain how to interpret results – MSHC can provide advice on diagnosis and management: 1800 009 903 or www.mshc.org.au

If positive results in pregnant women and/or babies: should discuss with a health professional with expertise in the area

Treatment

Refer to treatment guidelines (https://www.mshc.org.au/health-professionals/treatment-guidelines/syphilis-treatment-guidelines)

- Give benzathine penicillin not benzylpenicillin (this is ineffective against syphilis)
- Abstain from sex until seven days after patient and partner(s) have both received treatment
- Contact tracing and partner notification:
 - For positive cases, you must test **AND** treat (don't wait for results) their sexual partners and children

For non-pregnant adults:

- Available in doctors' bag:
 - Primary and secondary (early) syphilis: 1.8 gm = 2.4 million units IMI stat
 - Late latent syphilis: 1.8 gm = 2.4 million units IMI weekly for 3 weeks

In pregnancy

Call the MSHC Clinicians Advice Line: 1800 009 903

Congenital syphilis

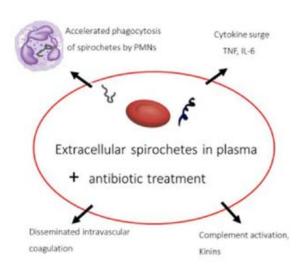
Seek specialist advice



Jarisch Herxheimer reaction

- Occurs in ~ 10—25% of patients when given benzathine penicillin treatment
- Most commonly occurs in early syphilis
- Usually results in a flu-like reaction
- Responds well to paracetamol

May be associated with threatened premature labour



Beware of reinfection

- Reinfection may occur from a sexual partner
 - Can occur if partner(s) are given inadequate treatment e.g. given the incorrect type of penicillin
- Monitor RPR (should fall fourfold = 2 dilutions over 6 months)
- Titres fall with treatment
- Retest in pregnancy
 - Consider repeating serology at 26-28 weeks (when they are having their oral glucose tolerance test)
- **Beware** a rising titre following treatment = probable reinfection.

Summary of learnings

Syphilis is happening in our community (including in pregnancy)

- Consider primary and secondary syphilis presentations
- If ulcer present take a swab for syphilis PCR on HSV multiplex (check with your lab if this test is available)
- Interpret serology and can ask for help
- Fill out DH syphilis notification form with as much information as possible
- Do not delay treatment
- Benzathine Penicillin in Doctors bag
- Watch out for Jarisch Herxheimer Reaction
- Contact trace and treat partners
- Look for other STI including blood borne viruses (BBV) and treat
- Repeat serology
- Beware reinfection
- Syphilis is curable, but if left untreated, can lead to serious complication
- Full list of key resources and web links will be made available on the RACGP Vic website with these slides

Relevant links

Victorian government information for clinicians:

- Congenital Syphilis in Victoria Chief Health Officer Advisory Mar 2021: www2.health.vic.gov.au/about/news-and-events/healthalerts/congenital-syphilis
- Congenital Syphilis: Important information for health professionals: www2.health.vic.gov.au/about/publications/Factsheets/congenital-syphilis-information-for-health-professionals
- Syphilis information for health professionals: www2.health.vic.gov.au/public-health/infectious-diseases/disease-information-advice/syphilis
- Syphilis fact sheet for clinicians: bit.ly/2XtbVLR
- Department of Health syphilis notification form (fill out if your patient tests positive): https://www2.health.vic.gov.au/public-health/infectious-diseases/notify-condition-now

Victorian government patient information:

- Congenital syphilis: Information for women and their partners: www2.health.vic.gov.au/about/publications/factsheets/congenital-syphilis-information-for-women-and-their-partners
- Better Health Channel Information on Syphilis: www.betterhealth.vic.gov.au/health/ConditionsAndTreatments/syphilis

Clinical guidelines:

- Australian STI management guidelines for use in primary care: www.sti.guidelines.org.au/
- Melbourne Sexual Health Centre (MSHC) guidelines: www.mshc.org.au/health-professionals
- Australian Government Department of Health. Pregnancy Care Guidelines: Syphilis: https://www.health.gov.au/resources/pregnancy-care-guidelines/part-f-routine-maternal-health-tests/syphilis#362-syphilis+testing

Clinician advice and assistance:

- MSHC diagnosis and management advice: 1800 009 903 or www.mshc.org.au
- Department of Health partner notification assistance: 03 9096 3367 or contact.tracers@health.vic.gov.au
- Online partner notification tools: https://letthemknow.org.au/ https://letthemknow.org.au/ https://www.thedramadownunder.info/let-them-know/

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Thank you for participating tonight

Department of Health and RACGP's next webinar Wednesday 15 September, 6pm- 7pm
Topic - COVID-19 Immunisation and people with cancer

