GP Perspective about being LGBTI Inclusive and Managing STIs in General Practice

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Disclosures

• Cosmetic Medicine Clinic - Sapphire Appearance Medicine Clinic
• Honorary Clinical Lecturer - Department of General Practice and Primary Health Care, Faculty of Medical and Health Sciences, University of Auckland
• Former Chairman of The Royal New Zealand College of Urgent Care
• Former Secretary, Treasurer and Censor of The New Zealand Society of Cosmetic Medicine
• Give Suturing courses for RNZCUC and ACMA, Examiner for RNZCUC, Review Standards for NZSCM
I’m an ordinary man (Rex Harrison, My Fair lady)

- Ponsonby Auckland
- Lipodystrophy secondary to HIV medication
- Older kinds of drugs to treat HIV called protease inhibitors (PIs) and nucleoside reverse transcriptase inhibitors (NRTIs) -- stavudine, or d4T (Zerit), and zidovudine, or AZT (Retrovir)
- Trisk of HIV transmission was much lower than that for HBV
- Stable on environmental surface 72hrs vs 7 days
- Transmission 100x greater than HIV
Me too

• I educate my staff

• “Misunderstanding arising from ignorance breeds fear” Lester B Pearson, Nobel Peace Laureate, former PM Canada

• The patient from Christchurch

• Greeting
Managing STI’s in General Practice

• Include routine screening for all sexually active and new patients as part of a general health check
• Be familiar with how to correctly take swabs
• Teach patients so that they can do this themselves
• Be familiar with the treatment protocols
• Keep stock of Ceftriaxone, Azithromycin, Benzathine Penicillin 1.8g must be long acting
• Get to know your friendly neighbourhood sexual health clinic
STI from GP Perspective focusing on MSM

- If you don’t take a temperature, you won’t find a fever
- How often
- PrEP every three months, by definition at greater risk
- All MSM at least annually (https://nzshs.org/guidelines)

**MSM who fall into one or more categories below require testing up to 4 times a year:**
- Any unprotected anal sex
- More than 10 sexual contacts in 6 months
- Participate in group sex
- Are HIV positive
- Use of PrEP or PEP
- Use recreational drugs during sex.
• Dr Karen Chung
Auckland

• STI screening free at Auckland Sexual Health Clinics
• Syphilis and HIV free testing at NZAF and Body Positive
Male Sexual Health Check

Clinical Editor’s Note
There is currently a syphilis epidemic with a large increase in confirmed cases in Auckland.

Assessment

1. If patients are:
   - aged < 25 years and sexually active, offer opportunistic testing when accessing healthcare, irrespective of risk factors. A HEDSSS assessment is recommended as part of routine care for young people.
   - aged ≥ 25 years, offer testing according to assessment of risk, presence of anogenital symptoms, or if patient requests a sexual health check.

2. If sexual contact of chlamydia, trichomoniasis, urethritis, epididymo-orchitis, or pelvic inflammatory disease (PID), complete testing:
   - Treat contacts empirically at the initial visit.
   - If patient is asymptomatic and concerned about a specific recent sexual event, test at the recommended testing interval.

3. Check for history of urethral discharge, dysuria, urethral irritation, testicular pain, or swelling.

4. Ask about:
   - genital skin symptoms e.g., lumps, sores, rashes.
   - anorectal symptoms e.g., discharge or bleeding in men who have sex with men.

5. Examination:
   - Genital and perianal skin, inguinal lymph nodes, penis, scrotum, and testes.
   - Check for urethral discharge. May be clear, milky, or mucopurulent.
   - Signs of epididymo-orchitis.
Assessment of risk

Risk is increased if within the last year, the patient has had:

- \( \geq 2 \) sexual partners
- a new sexual partner in the last 3 months
- an STI
- a sexual partner with an STI.
• **Treat contacts** empirically at the initial visit.

**Treat contacts**

- Patients with *chlamydia*, *gonorrhea*, *trichomoniasis*, *urethritis*, *epididymoorchitis*, and *pelvic inflammatory disease (PID)* need to have a sexual health check and be empirically treated at the initial visit. See relevant STI guideline for management of contacts.
- If contacts of *syphilis* or *HIV*, seek sexual health advice.
NAAT swab

- Nucleic Acid Amplification Test is NOT a culture
Management

Practice Point!

Dual therapy is recommended routinely due to increasing anti-microbial resistance to gonorrhoea.

1. If gonorrhoea is suspected, or if patient is a contact of gonorrhoea, test and treat immediately. Do not wait for test results.

2. Uncomplicated gonorrhoea infections:
   - *Ceftriaxone* 500 mg (available MPSO-endorsed "gonorrhoea") **intramuscularly** and *azithromycin* 1 g orally immediately.
   - If pregnant and breastfeeding, give ceftriaxone 500mg intramuscular immediately and azithromycin 1g orally immediately.
     - Both drugs pregnancy category B1.
     - Discuss infants born to mothers with untreated gonorrhoea infection with a **paediatrician**.
   - Severe penicillin allergy – ceftriaxone is only contraindicated as a treatment option in patients who have genuine, immediate, or severe hypersensitivity to penicillin or other beta-lactam drugs. For management, seek urgent **specialist sexual health advice**.
Syphilis – “the great imitator”

• Serological testing
• Auckland Labtest EIA if positive TPPA and RPR

The approach generally used by laboratories in New Zealand is to perform an initial test with EIA. If this is positive, the diagnosis is confirmed using TPPA. Disease activity is then determined using RPR. Depending on the patient-management system in use and the methodology of the local laboratory, clinicians either select “syphilis serology” on the laboratory request form or request the individual tests. BPAC
Determining the risk of exposure to syphilis

People with an increased risk of syphilis include those who:
• Originate from a country where syphilis is common, e.g. Sub-Saharan Africa, Asia-Pacific (especially Fiji), South America or Eastern Europe
• Have had sex with a person from a country where syphilis is prevalent
• Are male and have had sex with other males
• Are HIV positive or have had sex with someone who is HIV positive
• Have multiple sexual partners
• Have had sexual contact with a person diagnosed with syphilis
Figure 1: Penile chancre in primary syphilis (Supplied by Dermnet NZ)

Figure 2: Disseminated rash in secondary syphilis Pox (Supplied by Dermnet NZ /Dr John Adams)

Figure 3: Characteristic rash on the foot in secondary syphilis. (Supplied by Dr Edward Coughlan)

Figure 4: Condylomata lata in secondary syphilis (Supplied by Dermnet NZ/Dr John Adams)
There are two types of syphilis serology test - non-specific (non-treponemal) serology and specific (treponemal) serology. Non-specific tests detect antibodies that bind to antigens that are, or are similar to, those expressed by Treponema pallidum or expressed on host tissues during infection. These tests, such as the Rapid Plasma Reagin (RPR) and Venereal Disease Research Laboratory (VDRL) test, were traditionally used as screening tests for syphilis, and to measure disease activity and response to treatment. They are inexpensive to perform (compared to specific tests) but have a high false-positive rate, particularly in women who are pregnant, in people with cancers, autoimmune disorders, co-morbid viral infections, in older people and in people who use illicit drugs. BPAC
Specific tests detect antibodies that bind to proteins derived from Treponema pallidum. These tests, such as the Treponemal pallidum Particle Agglutination (TPPA), Treponema pallidum Haemagglutination (TPHA) and Fluorescent Treponemal Antibody (FTA) test, have commonly been used to confirm the diagnosis of syphilis. They are more expensive than non-specific tests, but have a low false-positive rate. More recently, the Enzyme immunoassay (EIA) and derivative immunoassays, such as the Chemiluminescent Microparticle Immunoassay (CMIA), that use specific Treponema pallidum antigens, have been developed. These tests are less expensive and have altered the way serology is used for testing for syphilis.
Interpreting syphilis serology

Syphilis serology results should be interpreted within the overall clinical picture, i.e. clinical examination, patient history and risk profile. Table 1 may be useful in aiding interpretation.

**Table 1: Interpreting syphilis serology**

<table>
<thead>
<tr>
<th>EIA</th>
<th>TPPA</th>
<th>RPR</th>
<th>Interpretation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Non-Reactive</td>
<td>Not tested</td>
<td>Not tested</td>
<td>No evidence of syphilis, or too early, retest in one month if strong suspicion</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>based on clinical evidence</td>
</tr>
<tr>
<td>Reactive</td>
<td>Non-Reactive</td>
<td>Non-Reactive</td>
<td>Possible early primary, latent or false-positive, retest in one month</td>
</tr>
<tr>
<td>Reactive</td>
<td>Non-Reactive</td>
<td>Reactive</td>
<td>Probable early primary, false positive possible but unlikely, retest in two</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>weeks</td>
</tr>
<tr>
<td>Reactive</td>
<td>Reactive</td>
<td>Non-Reactive</td>
<td>Evidence of past infection or possible latent infection, history will help</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>to differentiate</td>
</tr>
<tr>
<td>Reactive</td>
<td>Reactive</td>
<td>Reactive</td>
<td>Current syphilis</td>
</tr>
</tbody>
</table>
If positive, in NZ we refer

- If delay anticipated then Benzathine Benzylpenicillin IM or Doxycyline PO
Human Papilloma Virus

• Most common sexually transmitted disease
  (http://www.medsafe.govt.nz/Consumers/educational-material/gardasil9QandA.asp)
How many people get cancers that can be caused by HPV infection in New Zealand?
The table shows how many people get different cancers that can be caused by HPV. The numbers show how many new cases in New Zealand there are in a year.

Table 1: Number of cancers that can be caused by HPV infection (numbers from 2014)

<table>
<thead>
<tr>
<th>Cancer</th>
<th>Number of new cases per 100,000 of the population per year</th>
<th>Total number of registrations 2014</th>
<th>Estimated number of each cancer type caused by HPV infection*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cervical</td>
<td>5.5 (Death in 1.4)</td>
<td>143</td>
<td>128 (9 out of 10)</td>
</tr>
<tr>
<td>Vulvar</td>
<td>2.0</td>
<td>70</td>
<td>48 (6.9 out of 10)</td>
</tr>
<tr>
<td>Vaginal</td>
<td>0.5</td>
<td>20</td>
<td>15 (7.5 out of 10)</td>
</tr>
<tr>
<td>Anal</td>
<td>1.0 in men, 1.5 in women</td>
<td>32 in men, 54 in women</td>
<td>28 in men, 50 in women</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>(8.9 and 9.3 out of 10)</td>
</tr>
<tr>
<td>Penile</td>
<td>0.5</td>
<td>16</td>
<td>10 (6.3 out of 10)</td>
</tr>
<tr>
<td>Oropharyngeal</td>
<td>0.6 in men, 0.1 in women</td>
<td>16 in men, 4 in women</td>
<td>11 in men, 2 in women</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>(7.2 and 6.3 out of 10)</td>
</tr>
<tr>
<td>Tonsil</td>
<td>1.9 in men, 0.4 in women</td>
<td>57 in men, 13 in women</td>
<td>47 in men, 11 in women</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>(8.2 out of 10)</td>
</tr>
</tbody>
</table>

*Data on the numbers for each cancer estimated to be caused by HPV infection is from the US.
Anal Warts – Check under the bonnet

• Inspection
• DRE
• Any mass, anoscopy

• If evidence or suspected warts, refer for full examination.
Clinical Presentation and Examination

Standardized anatomic description is important to adequately communicate findings on physical examination. Four distinct regions has been proposed for description:

- Skin: 5 cm away from the anal opening upon simple examination
- Perianal (anal margin): within 5 cm of the anal opening
- Anal canal (intra-anal): not visible, needs anoscopy to see
- Transformation zone: above the dentate line/squamous columnar junction

8. The etiology and epidemiology of anal cancer. Welton ML, Sharkey FE, Kahlenberg MS
The types

• The HPV subtypes 6 and 11 are the cause of over 90% of the exophytic anal warts. They tend to be associated with low-grade dysplastic cellular changes (AIN 1).\textsuperscript{21}

• HPV types 16 and 18 are responsible for most of the chronic infections that cause severe dysplasia (AIN 2 or AIN 3) and the development of cancer.\textsuperscript{8,23}
What HPV vaccines are available?
There are three HPV vaccines approved for use in New Zealand.

Table 2: HPV vaccines

<table>
<thead>
<tr>
<th>Vaccine name</th>
<th>Strains protected against</th>
<th>Cervical cancer - these strains cause up to</th>
<th>Penile cancer - these strains cause up to</th>
<th>Genital warts - these strains cause up to</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cervarix</td>
<td>16 and 18</td>
<td>7 out of 10 cases</td>
<td>5 out of 10 cases</td>
<td>0</td>
</tr>
<tr>
<td>Gardasil</td>
<td>6, 11, 16 and 18</td>
<td>7 out of 10 cases</td>
<td>5 out of 10 cases</td>
<td>9 out of 10 cases</td>
</tr>
<tr>
<td>Gardasil 9</td>
<td>6, 11, 16, 18, 31, 33, 45, 52 and 58</td>
<td>9 out of 10 cases</td>
<td>6 out of 10 cases</td>
<td>9 out of 10 cases</td>
</tr>
</tbody>
</table>

From 2017 Gardasil 9 will be the only vaccine given in schools, and will replace Gardasil in general practices once stocks run out.
Thank you

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