Syphilis in Lanarkshire

Dental Symposium
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Overview

• Introduction
• Clinical stages
• Epidemiology
• IMT
• Health promotion
• SxH service
• Challenges

• Oral syphilis
• Clinical presentation
• Case studies
• Oral ulcer leaflet
• Sources of support
• Referral
• Further information
Syphilis

- Sexually transmitted bacterial infection – caused by the spirochaete Treponema pallidum.
- Transmitted by vaginal, anal and oral sex and during pregnancy.
- Infectious early syphilis has re-emerged as an important disease in the UK, mostly among men who have sex with men but also among young heterosexuals.
Why is syphilis important?

- It can be difficult to diagnose
  - People may have minimal or no symptoms and those with symptoms may not present to services.
  - People with symptoms who do present may present to many services with a variety of clinical presentations.
- It can affect pregnancy and cause congenital disease.
- If left untreated patients may develop severe, life threatening disease five to fifty years later.
- Once diagnosed it is relatively easy to treat and cure.
- It increases the risk of HIV transmission.
Clinical stages of syphilis

<table>
<thead>
<tr>
<th>Box 2</th>
<th>Stages of syphilis</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Primary syphilis</td>
<td>Incubation period 2-3 weeks (range 9-90 days)</td>
</tr>
<tr>
<td></td>
<td>Local infection</td>
</tr>
<tr>
<td>• Secondary syphilis</td>
<td>Incubation period 6-12 weeks (range 1-6 months); generalised infection</td>
</tr>
<tr>
<td>• Early latent syphilis</td>
<td>Asymptomatic syphilis of &lt;2 years’ duration</td>
</tr>
<tr>
<td>• Late latent syphilis</td>
<td>Asymptomatic syphilis of ≥2 years’ duration</td>
</tr>
<tr>
<td>• Late symptomatic syphilis (tertiary syphilis)</td>
<td>Cardiovascular syphilis, neurosyphilis, gummatous syphilis</td>
</tr>
</tbody>
</table>
Figure 1. Number of cases of infectious syphilis diagnosed at STI clinics in Scotland by sexual orientation and quarterly totals, 2000-2004.

- Female heterosexual
- Male heterosexual
- MSM/Bisexual men
- Unknown
- Total
Figure 2. Number of cases of infectious syphilis among MSM/bisexual men only, diagnosed at STI clinics in Scotland by quarterly totals, 2000-2004.
Number of reported Syphilis cases per 100,000 population in 2009
Sexual health experts warn of new syphilis threat

By Adam Brimelow
Health Correspondent, BBC News

Sexual health experts say they are deeply concerned about several outbreaks of syphilis among heterosexual teenagers.

In recent years the infection has been largely confined to older adults, particularly homosexual men.

But clusters of the disease are being seen in Teesside, Hampshire, Rochdale and central Scotland among teenagers.

The British Association for Sexual Health and HIV says there are likely to be other cases going unreported too.

Since the late 1990s there has been a sharp rise in cases of syphilis. Most of these have been in homosexual men, often in their 20s or 30s.

But recently there have been several small outbreaks across Britain of syphilis in heterosexual teenagers - described in detail in the International Journal of STD and Aids.

Undiagnosed cases
Increased risk of syphilis

- Number of sexual partners
- Unprotected vaginal, anal or oral sex
- Access to effective health care
- Stigma – related to STIs and to syphilis
- Homophobia
- Freedom to travel and ease of travel
- Reduction in use of barrier contraception
- ChemSex / Slamming – risk of STIs and BBVs
Warning about poisonous plants

48/3401 Scotland’s Chief Veterinary Officer, Sheila Voas, has warned animal owners across Scotland of the risk of poisonous plants. This summer’s fine weather has seen flora flourish across the country, but many plants commonly found in gardens and the countryside can cause serious health problems for animals such as horses and dogs. Some of these plants are well known, for example ragwort, yew and foxgloves. There are also lesser-known risks to look out for including sycamore seeds, which have recently been discovered to be noxious, and hemlock water dropwort, which is particularly profuse this summer and is poisonous to humans as well as animals.

There are numerous lists of poison plants available on the internet, including sections on National Health Service and Royal Horticultural Society websites:

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FIGURE 1: Number of cases of infectious syphilis diagnosed at GUM clinics in Scotland by sexual orientation and quarter year, 2005-2013.
FIGURE 2: Number of infectious syphilis cases diagnosed in Scotland in 2013 by NHS board of diagnosis and treatment.
Situation in Lanarkshire

• Increase in the number of cases of syphilis diagnosed in Lanarkshire in 2012 among young heterosexuals.
• Incident management team established
• Syphilis prevention and control plan developed and implemented.
• During 2012 and 2013 48 cases of syphilis were diagnosed - among 20 females and 28 males – 56% of whom were less than 25 years old.

• Sexuality was heterosexual for 34 (20 females, 14 males), and MSM or bisexual for 14 males.
# Stage of syphilis by year of diagnosis

<table>
<thead>
<tr>
<th>Stage of Syphilis</th>
<th>2012</th>
<th>2013</th>
<th>2014</th>
</tr>
</thead>
<tbody>
<tr>
<td>Primary and secondary</td>
<td>15</td>
<td>11</td>
<td>8</td>
</tr>
<tr>
<td>Early and late latent</td>
<td>6</td>
<td>15</td>
<td>15</td>
</tr>
<tr>
<td>Other</td>
<td>0</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>21</td>
<td>27</td>
<td>23</td>
</tr>
</tbody>
</table>
2014 cases

- 4P, 4S, 2EL, 8 EL/LL, 5LL
- 8 symptoms, 6 ANC, 5 STI screen, 5 PN, 1 other
- 13 HET (9F, 4M), 9 MSM, 1 Bi
- 1 known HIV +
Age breakdown for 2014 cases

<table>
<thead>
<tr>
<th>Age</th>
<th>&lt;20</th>
<th>20 - 29</th>
<th>30+</th>
</tr>
</thead>
<tbody>
<tr>
<td>HET</td>
<td>2</td>
<td>4</td>
<td>3</td>
</tr>
<tr>
<td>MSM</td>
<td>6</td>
<td>5</td>
<td>2</td>
</tr>
</tbody>
</table>
Syphilis and pregnancy

• Syphilis may be transmitted to the fetus during pregnancy.
• High levels of antenatal testing for syphilis have been achieved.
• No cases of congenital syphilis have been diagnosed.
Aims of key messages

• Raise awareness of syphilis

• Encourage testing, treatment and partner notification

• Promote prevention
Communication channels (1)

• Distribution of a leaflet to the service users of partner organisations.
• Dissemination of a detailed information sheet for staff working with target populations.
• Website [www.lanarkshiresexualhealth.org](http://www.lanarkshiresexualhealth.org) updated with information about syphilis and details of services, and website promoted.
Communication channels (2)

- Questionnaire used to ascertain what prompted clinic attendance.
- Targeted Facebook advertising - encouraging those at risk to attend for testing.
- Letter sent to S4 to S6 pupil parents about key messages and planned input.
- Delivery of key messages to all S4 to S6 pupils in 44 high schools following discussion with Education Departments and the Scottish Catholic Education Service.
NHS Lanarkshire Clinical Sexual Health Service

• Raised awareness among clinicians of the increase in cases and the indications for testing.
• Increased the provision of clinics for young people
• Set up *quick check clinics*
• Performed partner notification for all cases.
• Provided additional education and training.
• Expanded outreach work to engage with young people.
On going concerns

• How much transmission has taken place?
  – Asymptomatic
  – Symptomatic but did not present
  – Symptomatic, presented but not (yet) diagnosed
  – Completeness of partner disclosure and notification

• Infection during pregnancy after screening

• Concealed pregnancy with no screening test

• Chemsex
On going response

• Continued awareness raising, promotion of testing and promotion of prevention
• Development of CHI based register for antenatal booking
• Continued clinical service provision – diagnosis, assessment, treatment, PN
• Education and training
• Assessment of community DBST for syphilis
Facebook and Twitter message

Don’t get caught out, get checked out.

Syphilis is a sexually transmitted infection that can have serious long term effects on your health.

For more information visit: www.lanarkshiresexualhealth.org

or make an appointment to get checked out by calling 0845 618 7191
Oral manifestations of syphilis

• Important to include syphilis in the differential diagnosis of unusual oral ulcerations and white patches.

• Inappropriate treatment may be apparently curative
  – Patient remains highly infectious
  – May go on to develop serious disease
Primary infection:
  Chancre
Painless tonsillar enlargement
Painless lymphadenopathy

Secondary infection:
  Mucous patches and "snail-track" ulcers
  Condyloma lata
  Persistent firm cervical lymphadenopathy (buboes)
  Copper–coloured rash, leukoedera, depigmentation and alopecia
  Ulceronodular lesions (Lues maligna and nodular secondary syphilis)
  Split papules at the commissure
Primary stage syphilis sore (chancre) on the surface of a tongue
Symptoms of secondary syphilis

• Rash
  – A common symptom of secondary syphilis
  – Dark patches that appear on the skin, each about the size of a penny
  – May be widespread or limited – usually involves palms of the hands and the soles of the feet
  – Not usually itchy or painful.

• Condylomata lata are wart-like growths that may develop around the penis in men, or vagina in women.

• General malaise and lethargy.

• Mild fever and headaches are common.

• Sore throat.

• Joint pains.

• Swollen lymph nodes.

• Patchy hair loss can occur but is not that common.

• Less commonly, inflammation may develop in other parts of your body such as the liver, eyes, brain, or kidneys.
Secondary stage syphilis sores (lesions) on the palms of the hands
Secondary syphilis rash on the back
Aphthous-like fibrin covered lesion of the hard palate in secondary syphilis.

Aphthous-like fibrin covered lesion of the lower lip in secondary syphilis

Aphthous-like fibrin covered lesion of the left angle of the mouth in secondary syphilis

Tertiary infection:
Gummata (especially palate and tongue)
Interstitial glossitis
Syphilitic leukoplakia (leukokeratosis)
Syphilitic osteitis
Syphilitic sialadenitis
Argyll–Robinson pupil
Hitzig’s syndrome (trigeminal neuropathy)

Diseases reportedly associated with syphilis:
Erythema multiforme
Oral hairy leukoplakia-like lesions
Facial palsy in early disease
Case study 1

• 28 yo male (seen at HIV dental Rx clinic)
• PC - Oral ulceration present for 6 weeks
• No previous hx of oral ulceration
• Ulcer painless with peripheral induration
• Patient known to be homosexual and HIV positive
• Syphilis test results were positive
• Referred to sexual health service – Rx, contact tracing, ulcer healing, 2 undiagnosed cases (S, P)
Case study 2

- 36 yo male, A&E Dept presentation
- PC – large, relatively painless, ulcerated area
- Present for 3 weeks. No signif. PMH.
- 3 cm diameter ulcerated area
- Irregular firm margin, bled readily.
- Painless lymphadenopathy, mild fever.
- Referred to sexual health service – HIV neg.
- Bisexual, Manchester 3/12 before, UO-g sex
Case 3

• 62 yo male, referred to oral med by GDP
• Painful changes, swelling – R buccal mucosa
• Hx of oozing lesions at R commissure after trauma 4 weeks previously
• No signif. PMH. Patient abroad prior to changes.
• O/E tender ulcer, cheek and nodes enlarged
• Diagnosis – superinfected major aphthous ulcer
• Topical ointment, healing after 2 weeks
• 3 weeks later – further buccal mucosa changes, nodes, papular rash on hands and feet, erythematous macular rash
• Tested for syphilis, successfully treated
Sexual abuse

Sexual abuse is an abuse of power and may be perpetrated by male and female adults, teenagers and older children.

Unless there are intraoral signs of sexual abuse or the child discloses abuse, a dentist is most likely to detect the problem through emotional or behavioural signs.

The intraoral signs associated with sexual abuse include erythema, ulceration and vesicle formation arising from gonorrhoea or other sexually transmitted diseases, and erythema and petechiae at the junction of the hard and soft palate which may indicate oral sex.

Presentation of sexual abuse

- Direct allegation
- Sexually transmitted infection
- Pregnancy
- Trauma
- Emotional and behavioural signs
  - delayed development
  - anxiety and depression
  - psychosomatic indicators
  - self-harm
  - soiling or wetting
  - inappropriate sexual behaviour or knowledge
  - running away
  - drug, solvent or alcohol abuse
NHSL mouth ulcer leaflet

• 26 March 2014 - Letter from Kieran Watters, Dental Practice Advisor
  – Contents of leaflet
  – How to contact sexual health services
    • Testing, support
  – Main message: visit doctor or dentist if a lesion does not heal within three weeks

What should I do if I notice an ulcer?

- **Syphilis** is a Sexually Transmitted Infection (STI) which can be passed on easily through sex, including oral sex. One symptom which may occur in the early stage of the infection is the appearance of small, red ulcers/sores which heal after 3-6 weeks. These may be painful or painless. You might also notice swollen glands in the area near the sores.

- There may often be no signs or symptoms of infection but we have seen a recent increase in infections among young straight/heterosexual people in Lanarkshire.

- **Syphilis can be treated and treatment is effective, particularly if started in the earlier stages of the disease.**
Where can I get tested?

If you are sexually active it is important to have regular sexual health checks for syphilis, chlamydia, gonorrhoea and HIV, especially if you have a new or multiple partners.

You can get a full sexual health check-up in a welcoming, confidential setting at a Sexual Health Clinic (formerly Genito-urinary Medicine or GUM clinic). The staff are specially trained and very experienced in helping people who are concerned they may have an infection. You may need to have a blood test and if an ulcer/sore is present a swab will also be taken. For some people syphilis may not show up in the blood test straight away and so it may need to be repeated. This is why it is important to have regular sexual health checks.
If you have any concerns about syphilis and think you may have symptoms, please attend your local Sexual Health Clinic.

You can make an appointment by calling 0845 618 7191 from 9.00am–4.45pm Monday to Friday.
Support regarding decision making

• Contact the NHSL sexual health services by phoning 01236 707 593 and asking to speak to one of the sexual health doctors or nurses.
Referral of patients

• To the NHSL Sexual Health Service – by providing a leaflet and advising the patient to make an appointment on 0845 618 7191 (or by supporting the patient to do this while at the practice).

• To the patient’s GP – by advising the patient to make an appointment, or in writing / by phone.

• To oral and maxillofacial surgery at Hairmyres, Monklands and Wishaw.
Sexually Transmitted Infections

Read Syphilis related articles:

Syphilis

Syphilis cases are increasing in Lanarkshire

What is it?
Syphilis is a **sexually transmitted infection** that affects both men and women, and it is caused by a bacterium called *Treponema pallidum*.

What happens if I have Syphilis?
http://www2a.cdc.gov/stdtraining/self-study/syphilis/default.htm

Self-Study STD Modules for Clinicians
- Syphilis

The Self-Study STD Module - Syphilis is a web-based training course designed to guide clinicians in the diagnosis, treatment, and prevention of syphilis infection. This training module is based on the STD curriculum developed by the National Network of STD/HIV Prevention Training Centers.

CE Origination Date: July 2, 2014
CE Expiration Date: July 2, 2016

Course Objectives

After completing this course you will be able to:

- Describe the epidemiology of syphilis in the U.S.
- Describe the pathogenesis of Treponema pallidum.
- Discuss the clinical manifestations of syphilis.
- Identify common methods used in the diagnosis of syphilis.
- List the CDC-recommended treatment regimens for syphilis.
- Summarize appropriate prevention counseling messages for patients with syphilis.
- Describe public health measures for the prevention of syphilis.
Further reading


Specific journal articles

