THE NORTHERN HOSPITAL

GONORRHOEA

James Boswell, oil on canvas, Sir Joshua Reynolds, 1785, National Portrait Gallery London.

Tuesday 14 December: *It is very curious to think that I have now been in London several weeks without ever enjoying the delightful sex, although I am surrounded with numbers of free-hearted ladies of all kinds: from the splendid Madam at fifty guineas a night, down to the civil nymph with white-thread stockings who stamps along the Strand and will resign her engaging person to your honour for a pint of wine and a shilling. Manifold are the reasons for this my present wonderful continence. I am upon a plan of economy, and therefore cannot be at the expense of first-rate dames. I have suffered severely from the loathsome distemper, and therefore shudder at the thoughts of running any risk of having it again. Besides the surgeon's fees in this city come very high.*

…However I hope to be more successful. In this view, I had now called several times for a handsome actress of Covent Garden Theatre whom I was a little acquainted with, and whom I shall distinguish in this my journal by the name of Louisa…

Monday 17 January: *Louisa and I continued our study of French, which was useful as it gave us some employment and prevented us from tiring on account of conversation becoming insipid from sameness that must necessarily happen when two people are much together. I this day again had full fruition of her charms. I still though found that the warm enthusiasm of love was over. Yet I continued to mention my fears of her having some other favourite. I first said I would watch her carefully and would come at different times and by surprise if possible, that I might find out the truth. But I recovered myself and said I was sure I had no reason, so would not anxiously enquire. "Indeed Sir," said she, "its better not. For it is a maxim with me, where there is no confidence, there is no breach of trust".*

Tuesday 18 January: *I this day began to feel an unaccountable alarm of unexpected evil: a little heat in the members of my body sacred to Cupid, very like a symptom of that distemper with which Venus, when cross, takes it into her head to plague her votaries. But then I had run no risks. I had been with no woman but Louisa; and sure that she could not have such a thing. Away then with such idle fears, such groundless, uneasy apprehensions! When I came to Louisa's, I felt myself stout and well, and most courageously did I plunge into the fount of love, and had vast pleasure as I enjoyed her as an actress who had played many a fine lady's part. She was remarkably fond of me today, and sighing said, "What will become of me if I lose you now?"*

Thursday 20 January: *I rose very disconsolate**,** having rested very ill by the poisonous raging in my veins and vexation boiling in my breast. I could scarcely credit my own senses. What! thought I, can this beautiful, this sensible, and this agreeable woman be so badly defiled? Can corruption lodge beneath so fair a form? Can she who professed delicacy of sentiment and sincere regard for me, use me so very basely and so very cruelly? No, it is impossible. I have just got a gleet by irritating the parts too much with excessive venery. And yet these damned twinges, that scalding heat, and that deep-tinged loathsome matter are the strongest proofs of an infection…Am I, who have had safe and elegant intrigues with fine women, become the dupe of a* ***strumpet****?*

…I then went to Louisa. With excellent address did I carry on this interview, as the following scene, I trust will make appear.

LOUISA: *My dear Sir, I hope you are well today.*

BOSWELL: *Excessively well, I thank you. I hope I find you so.*

LOUISA: *No, really, Sir. I am distressed with a thousand things. (Cunning jade, her circumstances!) I really don't know what to do.*

BOSWELL: *Do you know that I have been very unhappy since I saw you?*

LOUISA: *How so, Sir?*

BOSWELL: *Why, I am afraid that you don't love me so well, nor have not such a regard for me, as I thought you had.*

LOUISA: *Nay dear Sir! (Seeming unconcerned.)*

BOSWELL: *Pray, Madam, have I no reason?*

LOUISA: *No indeed Sir you have not.*

BOSWELL: *Have I no reason Madam? Pray think.*

LOUISA: *Sir!*

BOSWELL: *Pray, madam in what state of health have you been in for some time?*

LOUISA: *Sir, you amaze me.*

BOSWELL: *I have but too strong, too plain reason to doubt of your regard. I have for some days observed the symptoms of disease, but was unwilling to believe you so very ungenerous. But now, Madam, I am thoroughly convinced.*

LOUISA: *Sir, you have terrified me. I protest I know nothing of the matter.*

BOSWELL: *Madam, I have had no connection with any woman but you these two months. I was with my surgeon this morning, who declared I had got a strong infection, and that she from whom I had it could not be ignorant of it. Madam, such a thing in this case is worse than from a woman of the Town, as from her you may expect it. You have used me very ill. I did not deserve it. You know you said where there was no confidence; there was no breach of trust. But surely I placed some confidence in you. I am sorry that I was mistaken.*

LOUISA: *Sir, I will confess to you that about three years ago I was very bad. But for these fifteen months I have been quite well. I appeal to God Almighty that I am speaking true, and for these six months I have had to do with no man but yourself.*

BOSWELL: *But by G-D, Madam, I have been with none but you, and here I am very bad.*

LOUISA: *Well, Sir, by the same solemn oath I protest that I was ignorant of it*.

BOSWELL: *Madam I wish much to believe you. But I own I cannot upon this occasion believe a miracle.*

LOUISA: *Sir, I cannot say more to you. But you will leave me in the greatest misery. I shall lose your esteem. I shall be hurt in the opinion of everybody, and in my circumstances*

BOSWELL: *(to himself). What devil does the confounded jilt mean by being hurt in her circumstances? This is the grossest cunning. But I won't take notice of that at all….Madam as to the opinion of everybody, you need not be afraid. I was going to joke and say that I never boast of a lady's favours. But I give you my word of honour that you shall not be discovered.*

LOUISA: *Sir this is being more generous than I could expect.*

BOSWELL: *I hope Madam, you own that since I have been with you I have always behaved like a man of honour.*

LOUISA: *You have indeed Sir.*

BOSWELL: *(rising) Madam, your most obedient servant.*

During all this conversation I really behaved with a manly composure and polite dignity that could not fail to inspire awe, and she was pale as ashes and trembled and faltered…And yet her positive asseverations really stunned me. She is in all probability a most dissembling whore.

Extracts from The London Journal of James Boswell, 1762-1763.

Mr Boswell's pompous indignations that his high class actress lover turned out to be nothing more than a "strumpet" appear quite laughable given the fact that he himself contracted gonorrhoea on no less than 17 occasions all of which he meticulously recorded in his infamous journals. His (highly paid) surgeon's advice that Louisa could not have been unaware of her infection was also quite wrong, as we now know that the "distemper" can on many occasions be quite asymptomatic in females. Louisa in all probability could indeed have been totally unaware of her infection.

GONORRHOEA

Introduction

Gonorrhoea is common worldwide and affects both sexes.

Infection may be symptomatic or asymptomatic.

Infections of the cervix, anus and throat usually cause no symptoms.

Gonorrhoea can have acute and chronic sequelae.

Epidemiology

The rate of notified cases of gonorrhoea increased in Victoria in the late 1990s to a level not seen since the mid 1980s.

A similar phenomenon was noted elsewhere in Australia and overseas. This increase has been sustained in Victoria.

Gonococcal infections are now the second most common STI in Australia, the UK and the USA.

In Australia Gonorrhoea is most commonly diagnosed in men who have sex with men (MSM), among young (heterosexual) Aboriginal and Torres Strait Islander people living in remote and very remote areas and travellers returning from high prevalence areas overseas.

Pathology

Organism:

- Neisseria gonorrhoeae, (Gonococcus), a Gram-negative intracellular diplococcus.

Complications:

1. In males:
    - Epididymitis.
    - Prostatitis.
    - Urethral stricture.
2. In females:
    - PID
    - Infertility
    - Chronic pelvic pain.

3. In either sex:

   On rare occasions:

   - Septic arhtritis.
   - Septicemia.
   - Conjunctivitis can occur in neonates (and rarely in adults). It may cause blindness if not rapidly and adequately treated.

4. Gonorrhoea and HIV:

   - Gonorrhoea may increase susceptibility to the sexual acquisition of HIV infection and increase HIV infectiousness.

Reservoir

- Humans

Transmission

- Gonorrhoea is transmitted by contact with exudates from mucous membranes of infected people, almost always as the result of sexual activity.
- Gonococcal conjunctivitis can occur in neonates who have had contact with the mother's infected birth canal during childbirth.

Incubation Period

- Two to seven days.

Period of Communicability

- Communicability may extend for months in untreated individuals.

Susceptibility and Resistance

- Susceptibility to infection is universal.
- Infection does not provide protection from recurrent infection.

Clinical Features

Infections with N. gonorrhoeae may present with a number of clinical syndromes.

1. In males:

- The most common presenting symptom in males is a painful purulent urethral discharge.
- If left untreated, complications may include epididymitis, prostatitis
- Long term urethral stricture may develop.

2. In females:

Initial symptoms are frequently mild and may pass unnoticed.

A few days after exposure there may be:

- Urethritis.
- Cervicitis.
- Abnormal vaginal discharge.
- Post-coital bleeding.
- Longer term pelvic inflammatory disease may develop:
    - ♥ This may further predispose to ectopic pregnancy, infertility or chronic pelvic pain.

In both males and females:

3. Anorectal infection:

- This is is more common in homosexual males and is usually asymptomatic.
- It may cause pruritis, tenesmus and discharge.

4. Pharyngeal infection:

- This is usually asymptomatic.

5. Conjunctivitis:

- This can occur in neonates and rarely in adults.
- It is purulent and is a serious complication as it may cause blindness if not rapidly and adequately treated.

6. Rare presentations include dissemination with:

- Septicemia

- Septic arthritis
- Petechial or pustular skin lesions

Investigations

1. Swabs for microscopy, culture and sensitivity testing can be taken from:

   - Urethra.
   - Cervix.
   - Pharynx.
   - Rectum.

   Samples should then be sent to the laboratory in an appropriate transport medium.

   Gram stain, culture and sensitivity studies should be done even with the availability of NAAT (i.e. Nucleic Acid Amplification Tests, such as PCR)

   There can be significant regional differences in antibiotic susceptibility patterns of *N. gonorrhoeae*. PCR testing can identify *N. gonorrhoeae* but cannot determine antibiotic sensitivity.

2. PCR testing:

   - Nucleic acid testing can be performed on **cervical** and **urethral swabs** and **urine.**
   - In women, PCR testing of urine is less sensitive than PCR testing on endocervical swab specimens.
   - In cases diagnosed by PCR, further specimens should be obtained if possible for culture to allow monitoring of antibiotic resistance.

   Co-infection with Chlamydia trachomatis sometimes occurs, particularly in imported cases. Screening for chlamydia should be considered when testing for N. gonorrhoeae.

   Amplicor: [3]

   - The **Amplicor test** is a PCR testing kit that can detect both N. gonorrhoeae and Chlamydia trachomatis in a variety of specimens. Urine is most the commonly tested specimen with the amplicor technique.

Management

Strains of gonococci resistant to penicillin are common and widespread.

Resistance to fluoroquinolone antibiotics such as ciprofloxacin is common among isolates from infections acquired in Asia.

Ciprofloxacin resistance in gonococcal isolates in Victoria is increasing.

Penicillin and fluoroquinolone resistance of *N. gonorrhoeae* are now common.

Use:

- **Ceftriaxone 500 mg in 2 mL of 1% lignocaine IM as a stat dose.**

Plus

- **Azithromycin 1 gram orally stat dose.**

Or

- Doxycycline 100 mg orally, 12-hourly for 7 days (for the treatment of chlamydia)

Note that Azithromycin is now used concomitantly with ceftriaxone *irrespective* of the results of testing for chlamydial infection, to delay cephalosporin resistance in *N. gonorrhoeae*.

Furthermore, *in vitro* evidence suggests synergy between azithromycin and cephalosporins, and reports show improved eradication of pharyngeal gonorrhoea when azithromycin is combined with cephalosporins.

For patients hypersensitive to penicillins seek expert advice.

For treatment of disseminated gonococcal sepsis, use:

- **IV cefotaxime or ceftriaxone.**

See also latest Antibiotic Guidelines for full prescribing details.

Contact tracing:

Sexual partners should be examined, investigated and then treated empirically to prevent re-infection and complications.

Notification

Gonorrhoea (Group C disease) must be notified in writing within five days of diagnosis.

Note also that Medical practitioners have a statutory obligation under the Children and Young Person's Act 1989 to notify the Department of Human Services Child Protection Service if they believe that a child is in need of protection on the basis of sexual abuse.

References

1. The Blue Book Website

2. eTG - March 2015.

    - Antibiotic Therapeutic Guidelines, 15th ed 2014.

3. Leslie DE et al. An assessment of the Roche Amplicor® *Chlamydia trachomatis/Neisseria gonorrhoeae* multiplex PCR assay in routine diagnostic use on a variety of specimen types. Commun Dis Intell 2003; 27:373 - 379.

4. Gonorrhoea in Melbourne Sexual Health Clinic (MSHC) Clinical Guideline, February 2015.

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