

Target populations for screening

Infection with *Chlamydia trachomatis* is most common in adolescents and young sexually active adults. As a guide, patients less than 25 yrs old should be offered testing when they access healthcare, in particular when attending for sexual health related issues such as pregnancy, contraception and cervical cytology screening. Patients outside this age-group should be offered testing according to assessment of risk, or if they request it.

It is a requirement to test for Chlamydia pre-TOP and pre-IUCD insertion

Introduction

Aetiology and Epidemiology:

- Causative agent is ***Chlamydia trachomatis***
- Infects **endocervix, urethra, rectum** and occasionally **pharynx and eye**
- Transmitted through contact with infected genital secretions
- **Incubation period about 7-21 days**
- **70% of women asymptomatic, ~50% of men asymptomatic**
- **Infection can persist for months to years if untreated (documented up to 3 years)**

Genital Infection:

Symptoms:

- **Women** may complain of **vaginal discharge, dysuria**, lower abdominal **pain, abnormal bleeding** (if endometritis present)
- **Men** may complain of **urethral discharge, dysuria, urethral irritation, testicular pain/swelling**

Chlamydia

Signs:

- **Women - mucopurulent cervicitis**, signs of **PID**, urinalysis may show **pyuria**
- **Men - urethral discharge** (clear, milky, mucopurulent), signs of **epididymo-orchitis**
- **Both men and women may have no signs at all**

Complications:

- **PID (and subsequent infertility, pelvic pain, ectopic pregnancy)**
- **Epididymo-orchitis**
- **Reiters disease**
- **Fitz-Hugh Curtis syndrome (perihepatitis)**

Testing Methods

General Points:

- Testing methods vary between laboratories, and these methods have different sampling requirements and accuracy. It is important to take this into account when taking samples and interpreting results

Enzyme Immunoassay (EIA):

- **Sensitivity ~70% (false negatives common), specificity ~98% (false positives common in low prevalence population)**
- Suitable for testing **from endocervix and urethra only**

Nucleic Acid Amplification Tests (NAATs):

- In New Zealand mainly **PCR** (polymerase chain reaction) and **SDA** (strand displacement amplification)
- **Sensitivity ~90 -95%, specificity 99.5%**
 - **First Void Urine has reduced sensitivity in women (~80%)**
 - **The accuracy of a self-obtained vaginal swab is comparable to a clinician obtained endocervical or vaginal swab**
- Suitable for samples **from endocervix, vagina, urethra, and first void urine**
- NAATs can be used for testing the eye, pharynx and rectum but are not validated for these sites

Chlamydia

Note:

FVU – first 15-30ml of stream, preferably 2 hours after patient has last passed urine

Diagnostic Medlab Testing (DML)

NOTE:

DML performs EIA testing on female endocervical and urethral swabs, and uses an expanded grey zone to enhance sensitivity. Positive tests are confirmed by either Direct Fluorescent Antibody (DFA) or by PCR, and PCR is performed on **all negative samples** from women up to the age of 25. All male samples are tested with PCR.

Specimen collection:

Females:

- **Endocervical** and **urethral swab** - EIA testing
- OR **FVU** - PCR testing

Males:

- **FVU** – PCR testing

Management

Routine treatment non-pregnant female & male:

- **Azithromycin 1 g stat po** OR
- **Doxycycline 100mg bd 7 days**
- Advise no unprotected sex for 1 week after initiation of treatment and until partner(s) have completed treatment

Note:

Azithromycin should not be used for treatment of infection in non-genital sites or for complicated infection such as PID or Epididymitis

Pregnant or breast feeding:

1. **Azithromycin 1gm po** stat

Note: this is not currently licensed in pregnancy but has been used extensively and appears to be safe

2. **Amoxicillin 500mg tds po 7 days**

Other options:

1. Erythromycin ethyl succinate (EES) 800mg qds po 7days or 400mg qds for 14 days
2. Erythromycin base –500mgs qds for 7days

Erythromycin estolate is contraindicated in pregnancy because of drug related hepatotoxicity.

Note: Roxithromycin is not suitable for treatment of chlamydia

Partner notification and management of sexual partners

Partner notification:

- Sexual partners from **the previous 2 months** (or most recent sexual contact if 2 months since last sexual contact) should be tested and treated empirically

Management of sexual partners:

- Perform a sexual health screen and treat empirically for Chlamydia
- If Chlamydia positive – partner notification as above

Test of Cure

- Required **ONLY** in those patients treated with **Erythromycin** or **Amoxicillin** and should be done at least **4 weeks after initiation of treatment**
- For pregnant women an FVU or a vaginal swab may be used rather than an endocervical swab (**only if testing with a NAAT**) to avoid a further speculum examination
- **Pregnant women should be offered a repeat test prior to delivery as a test of re-infection.**

Follow-up

- All patients should be followed up to ensure resolution of symptoms, check that sexual partners have been treated, and ensure compliance
- All patients should be offered re-screening 3 months after treatment

Referral guidelines

Referral to a Specialist Sexual Health Service is recommended for:

- Screening and treatment of sexual partners if clinician wishes
- Complicated clinical situations for management advice

Chlamydia