NZSHS
THE NEW ZEALAND SEXUAL HEALTH SOCIETY
SEXUAL HEALTH FOR ALL

Chlamydia

The Ministry of Health developed specific recommendations for Chlamydia Testing in New Zealand and this best practice guide uses these (see www.moh.govt.nz/moh.nsf/pagesmh/8210)

Recommendations for Asymptomatic Opportunistic Testing

This is particularly important if the individual has not consistently used condoms.

Females

Testing should be offered to all sexually active females under 25 years of age if they have never been tested. The offer of testing should be repeated annually to all sexually active females under 25 years of age if they have:

- had two or more partners in the last 12 months, or
- had a recent partner change

Males

Consider testing in sexually active males if they are:

- aged under 25, and never been tested

Re-testing should be offered if:

- two or more sexual partners in the last year or
- a recent partner change, or
- co-infection with another STI

Testing should be routinely given to:

- those with symptoms suggestive of chlamydia infection (see below for symptoms)
- sexual partners of those with suspected or confirmed chlamydia infection
- patients requesting a sexual health check
- patients with another STI
- pregnant women (test in first trimester and repeat in third trimester if there are ongoing risk factors)
- women undergoing a termination of pregnancy

- mothers of infants with chlamydial conjunctivitis or pneumonitis
- pre-menopausal women undergoing uterine instrumentation
- semen and egg donors
- men who have sex with men.

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

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

Ideally a Nucleic Acid Amplification Test (NAAT) method of testing should be used.

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

Nucleic Acid Amplification Tests (NAATs)

- In New Zealand mainly **PCR** (polymerase chain reaction) and **SDA** (strand displacement amplification)
- **Sensitivity ~90 -95%, specificity 99.5%**
- Suitable for samples from **endocervix, vagina, urethra**, and **first void urine**

Recommendations for Women

- **In women undergoing a speculum exam for a full STI evaluation or in symptomatic women, an endocervical swab is recommended**
- **For opportunistic testing of asymptomatic women a vaginal swab has similar sensitivity to cervical specimens**
  - The accuracy of a self-obtained vaginal swab is comparable to a clinician obtained endocervical or vaginal swab
  - First void urine is less sensitive in women (~80%) than a vaginal swab

Males

- **A first void urine specimen is recommended (FVU)**
  - Collect first 15-30ml of stream, preferably 2 hours after patient has last passed urine

Men Having Sex With Other Men

- **Men who have sex with men who are practising receptive anal sex should have an anal swab taken**
  - Insert the swab into anal canal, rotate and replace into swab container
  - Men who have sex with men with ano-rectal symptoms should be referred to a specialist clinic for evaluation
- NAATs can be used for testing the eye, pharynx and rectum but are not validated for these Sites.However they are used frequently in clinical practice and their use is widely accepted

Enzyme Immunoassay (EIA)

- **Sensitivity ~70%** (**false negatives** common), **specificity ~98%** (**false positives** common in low prevalence population)

NAATs are preferable to EIA as they are more sensitive and specific.

- Confirmatory testing of EIA is necessary due to its lower specificity by using a second testing methodology e.g. PCR or Direct Fluorescent antibody to reduce the false positive rate
  - Some laboratories using EIA methodology use an expanded grey zone with retesting of samples by a second method to improve sensitivity

Specimen Collection

- Suitable for testing **endocervical, urethral and urine specimens only**
- The local laboratory handbook should be consulted to find out which specimen containers should be used.

Females

- No test is 100% sensitive or specific. Whichever test is used, increasing the number of sites sampled increases the detection of Chlamydia.

  This is particularly important for EIA tests; hence dual site testing of endocervix and urethra is recommended for women

  Both swabs can be placed in the same swab container for processing by the laboratory

Males

- First Void urine is as sensitive as a urethral swab and is preferred specimen patient preferably should have not passed urine for at least 2 hours
- **Men Who Have Sex With Men – a rectal swab using a NAAT is suggested.**
  If symptomatic discuss with local Sexual Health Clinic because of possibility of Lymphogranuloma Venereum (LGV)

Management

Routine Treatment Non-Pregnant Female and 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: Single dose Azithromycin should not be used for treatment of complicated infection such as **PID** or **Epididymitis** (see separate guidelines).

Pregnant or Breastfeeding

- **Azithromycin 1gm po** stat

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

- **Amoxycillin 500mg tds po 7 days**

Other options:

- Erythromycin ethyl succinate (EES) 800mg qds po 7days
- Erythromycin base 250mg qds po 14 days
- EES 400mg qds po 14 days

Note: Roxithromycin is not suitable for treatment of chlamydia.

Men Who Have Sex With Men

- **Asymptomatic rectal infection** – Doxycycline 100mg BD for 1 week { These has been debate concerning optimal treatment so if Azithromycin 1.0 gram is used a test of cure is highly recommended)
- **For Symptomatic rectal infection** – Doxycycline 100mg BD for 21 days to cover Lymphogranuloma venereum (LGV).
- In cases of poor compliance use 1 gram weekly for 3 doses.
- All suspected cases of LGV should be discussed with a Sexual Health Physician or an Infectious Diseases Physician

Adult Conjunctivitis

- Azithromycin 1 gram stat

Partner Notification and Management of Sexual Partners

Partner Notification

- If the index patient is symptomatic ,a look-back period with a cut-off of 60 days is used to identify those partners at greatest risk.If the index person is asymptomatic,an arbitray look-back of six months, or until the last previous partner (which ever is the longest time), is recommended

Management of Sexual Partners

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

Test of Cure

- Recommended in those patients treated with non-standard antibiotic regimen
  - or in pregnancy
  - or in rectal infection

Repeat tests should be done at least **5 weeks after completion of treatment to avoid the risk of false positives**.

- 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
  - repeat tests should be done preferably in the third trimester so that treatment can be given prior to delivery if required

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

This best Practice Guide has been produced as a collaborative project by Counties Manukau District Health Board and Auckland Sexual Health Service, and has been adapted for use by NZSHS as a National Guide for the Diagnosis and Treatment of Sexually Transmitted Infections. Updated – 2009.