Chlamydia

MANAGEMENT SUMMARY

TEST IF:

- Sexually active under 30 years
  - OR more than 2 sexual contacts in last year
  - OR has had an STI in past 12 months
  - OR has a sexual contact with an STI
- Pregnant
- Increased risk of complications of an STI, e.g. pre-termination of pregnancy (TOP)
- Signs or symptoms suggestive of chlamydia:
  - **Females: Vaginal discharge / dysuria / lower abdominal pain/ abnormal bleeding / anal pain or discharge**
  - **Males: Urethral discharge / dysuria / testicular pain or swelling / anal pain or discharge**
- Requesting a sexual health check

Note: Most laboratories are automatically performing multiplex NAAT testing for chlamydia & gonorrhoea (+/-trichomoniasis). False positive gonorrhoea results are possible in low prevalence populations – see NZSHS Management of Gonorrhoea 2017, and Response to the Threat of Antimicrobial Resistance www.nzshs.org/guidelines.

RECOMMENDED TESTS

- It is recommended to test for co-existing STIs (see Sexual Health Check guideline **www.nzshs.org/guidelines**)
- **Females:**
  - A self-collected vulvovaginal NAAT swab if asymptomatic, examination declined and no other tests required
  - A vulvovaginal NAAT swab prior to a speculum examination and other STI swabs if symptomatic or needs examination
  - Additional anorectal NAAT swab as indicated based on sexual history
  - **Note:** A first void urine has lower sensitivity in females than cervical or vaginal swabs so is not specimen of choice
- **Males:**
  - A first void urine (first 30ml), preferably ≥ 1 hour after last void
- **Men who have Sex with Men:**
  - **Additional pharyngeal and anorectal NAAT swabs** irrespective of reported sexual practices or condom use, as asymptomatic pharyngeal and rectal infection is common

Treat immediately if high index of suspicion, e.g. symptoms and/or signs, or contact of index case.

- Start treatment for patient and sexual contact/s, without waiting for lab results

MANAGEMENT

- Azithromycin 1g po stat (pregnancy category B1) – for asymptomatic urogenital infection
- Doxycycline 100mg po twice daily for 7 days **(NOT in pregnancy)** – for symptomatic urethritis, rectal, pharyngeal or eye infection, or if patient is on QT-prolonging medication (**www.medsafe.govt.nz/profs/PUArticles/DrugInducedQTProlongation.htm**)
- If anorectal symptoms and a positive chlamydia test, refer or discuss with a sexual health specialist as LGV proctitis requires further testing and doxycycline 100mg po twice daily for 21 days
- Advise to abstain from sex or use condoms for 1 week from the start of treatment and until 1week after sexual contact/s have been treated

PARTNER NOTIFICATION AND MANAGEMENT OF SEXUAL CONTACTS

- Be clear about language: 'partner' implies relationship – all sexual contacts in the last 3 months should be notified
- Contact/s should have a sexual health check and treatment for chlamydia with azithromycin 1g po stat, without waiting for test results
- If contacts test positive for an STI refer to specific guideline **www.nzshs.org/guidelines**
- Advise contact/s to abstain from sex or use condoms for 1 week from the start of treatment and until results of tests are available
- Most choose to tell contact/s themselves, giving written information is helpful
- Notifying all contacts may not be possible e.g. if there is insufficient information or a threat of violence

FOLLOW-UP

- By phone or in person, 1 week later
- No unprotected sex in the week post-treatment?
- Completed/tolerated medication?
- Notifiable contact/s informed?
- Any risk of re-infection? Re-treatment necessary if re-exposed to untreated contact
- Test of cure only needed if pregnant, extragenital infection or continuing symptoms
- Diagnostic tests can detect traces of dead organisms – wait at least 5 weeks before retesting
- Re-infection is common; offer repeat sexual health check in 3 months

The Ministry of Health supports the use of these clinical guidelines, developed by clinical experts and professional associations to guide clinical care.
Further guideline information – **www.nzshs.org/guidelines** or phone a sexual health specialist.
This STI Management Guideline Summary has been produced by NZSHS. Every effort has been taken to ensure that the information in this guideline is correct at the time of publishing (September 2017).

Introduction

- **Causative agent** is *Chlamydia trachomatis*. Serotypes D-K cause urogenital infection, while serovars L1-L3 cause lymphogranuloma venereum (LGV).
- Infects endocervix, urethra, rectum and occasionally pharynx and eye.
- **Transmission** is through
  - Contact with infected genital secretions
  - Sexual practices such as fingering which allow inoculation of infected secretions onto mucous membranes
  - From mother to baby at delivery.
- Approximately 70% of females and 50% of males are asymptomatic.
- **Chlamydia is most commonly diagnosed in**
  - Adolescents and young sexually active adults aged < 30
  - People who have multiple sexual contacts or a new sexual contact
  - People who have not consistently used condoms.

Test

- Patient with possible signs or symptoms of a chlamydia infection.
- Sexual contacts of chlamydia or other STIs.
- Pregnant females.
- Pre-TOP
- Pre IUD insertion in persons with a risk for STIs.
- Suspected epididymo-orchitis.
- Suspected pelvic inflammatory disease (PID).
- Sexually active patients aged < 30 years old opportunistically when accessing healthcare.
- Men who have sex with men (MSM).
- Patients outside this age-group should be offered testing according to assessment of risk, presence of ano-genital symptoms, or if the patient requests a sexual health check.

Note: If patient is asymptomatic and is concerned about a specific recent sexual event the recommended testing interval is 2 weeks from time of last unprotected sexual intercourse. If the patient is unlikely to return and has not been previously tested then test opportunistically at the time of presentation and offer a re-test in 2 weeks time.

Symptoms and Signs

Chlamydia infection commonly has no signs or symptoms. Symptoms are non-specific.

Females

- Vaginal discharge, dysuria, lower abdominal pain, abnormal bleeding, anal pain or discharge.
- Mucopurulent cervicitis with easily induced bleeding and/or signs of PID.
- Urinalysis may show sterile pyuria.

Males

- Urethral symptoms including discharge, dysuria, urethral irritation, testicular pain or swelling, anal pain or discharge.
- On examination, urethral discharge may be visible.
- Signs or symptoms of epididymo-orchitis (see Epididymo-orchitis guideline **www.nzshs.org/guidelines**).

Note: Rectal infections in both sexes are usually asymptomatic, but may present with anal pain, or discharge or other symptoms of proctitis such as bleeding and tenesmus .

Complications

- PID (and subsequent infertility, pelvic pain, ectopic pregnancy).
- Epididymo-orchitis.
- Sexually acquired reactive arthritis and/or conjunctivitis.
- Fitz-Hugh Curtis syndrome (peri-hepatitis).

Diagnostic Tests

- New Zealand laboratories use mainly NAAT (e.g. PCR).

Note: Most New Zealand laboratories are now automatically performing multiplex NAAT testing for chlamydia & gonorrhoea (+/- trichomoniasis). False positive gonorrhoea results are possible in low prevalence populations. Discuss any unexpected positive gonorrhoea results with a sexual health specialist.

Recommended specimens

Females

- **A vulvovaginal NAAT swab is the recommended specimen as it has the highest sensitivity for chlamydia testing in females.** This can be either clinician-collected or self-collected as follows: Remove the swab from the container, wipe the swab around the vaginal entrance, then insert the swab 4cm (thumb's length) into the vagina, count slowly to 5 and replace in the swab container.
- Females who report receptive anal sex require an anorectal NAAT swab.
- Anorectal swabs – can be collected by gently inserting the swab 4cm into the anal canal, rotating, and then replacing into the swab container.

Asymptomatic

- If the patient is asymptomatic, or if an examination is not required or is declined, then a self-collected vulvovaginal swab +/- anorectal swab should be taken – instruct as above.
- PLUS additional testing (see Sexual Health Check guideline **www.nzshs.org/guidelines**).
- **First void urine samples are less sensitive than vulvovaginal swabs in females and are therefore not the specimen of choice, but can be used if an asymptomatic patient declines examination and declines to do a self-collected vulvovaginal swab.**

Symptomatic

- Symptomatic females should always be examined if possible:
  - external ano-genital examination is required for females with ano-genital skin symptoms (e.g. warts, herpes, candidiasis, dermatological conditions).
  - speculum examination is required for proper clinical assessment of females complaining of vaginal discharge, dysuria, lower abdominal pain, abnormal bleeding.

  If doing a speculum examination – do the vulvovaginal swab prior to speculum insertion.
- **Females with anal pain or discharge or other symptoms of proctitis such as bleeding and tenesmus require anoscopy and further testing and should be referred or discussed with a sexual health specialist.**

Males

Asymptomatic

- First void urine (first 30ml).
- Preferably at least 1 hour after last void, but if the patient is unlikely to come back then it is still worthwhile to obtain a sample at the time of presentation.

Symptomatic

e.g. urethral symptoms, testicular pain or swelling, anal pain or discharge (see Urethritis in Males guideline **www.nzshs.org/guidelines** and/or Epididymo-orchitis guideline **www.nzshs.org/guidelines**).

MSM

- All MSM being screened for sexually transmitted infections should be offered pharyngeal and anorectal NAAT swabs for chlamydia testing irrespective of reported sexual practices or condom use because:
  - Pharyngeal and anorectal chlamydia is usually asymptomatic
  - Anorectal infection may result from oro-genital contact, fingering or anal-oral contact (see Sexual Health Check guideline **www.nzshs.org/guidelines**).
- Males with anal pain or discharge or other symptoms of proctitis such as bleeding, and tenesmus require anoscopy and further testing and should be referred or discussed with a specialist sexual health clinic.
- Anorectal swabs – can be collected by gently inserting the swab 4cm into the anal canal, rotating, and then replacing into the swab container.
- Pharyngeal swabs – should be wiped across the posterior pharynx, tonsils and tonsillar crypts.

Conjunctivitis

- Collect a conjunctival chlamydia NAAT swab by wiping swab over the lower eyelid.
- Collect an additional bacterial culture swab.

Management

Treatment regimens

- **Azithromycin 1g po stat (pregnancy category B1) – for asymptomatic urogenital infection.**
- **Doxycycline 100mg po twice daily for 7 days (NOT in pregnancy)** – for symptomatic urethritis, rectal, pharyngeal or eye infection, or if patient is on QT – prolonging medication (**www.medsafe.govt.nz/profs/PUArticles/DrugInducedQTProlongation.htm**).
- Advise to use abstain from sex or use condoms for 1 week from the start of trearment and until 1 week after sexual contacts have been treated.
- Provide the patient with a fact sheet.
- Partner notification.

Pregnant or breastfeeding

- **Azithromycin 1g po** stat (pregnancy category B1).

Complicated chlamydial infections (i.e. PID and epididymo-orchitis)

For further detail see PID guideline **www.nzshs.org/guidelines** and/or Epididymo-orchitis guideline **www.nzshs.org/guidelines**.

Partner Notification and Management of Sexual Contacts

- Be clear about language: 'partner' implies relationship – all sexual contacts in the last 3 months should be notified.
- Contact/s should have a sexual health check and treatment for chlamydia with azithromycin 1g po stat without waiting for test results.
- If contacts test positive for an STI refer to specific guideline **www.nzshs.org/guidelines**.
- Advise contacts to abstain from sex or use condoms for 1 week from the start of treatment and until results are available.
- Most choose to tell contacts themselves.
- Giving written information is helpful.
- Notifying all contacts may not be possible, e.g. if there insufficient information or a threat of violence.

Follow-up

- Patients should be followed up by phone or in person 1 week after treatment to assess resolution, give results,check adherence and ensure that all sexual contacts have been notified.
- Re-treatment is required if there has been any unprotected sex with untreated sexual contacts during the follow-up interval.
- All patients should be asked to re-attend for a sexual health check in 3 months

Test of Cure

- Test of cure only needed if pregnant, extragenital infection or persisting symptoms.
- Diagnostic tests can detect traces of dead organisms – wait at least 5 weeks before testing.

Referral Guidelines

Referral to or discussion with a sexual health specialist is recommended for:

- Screening and treatment of sexual contacts if clinician wishes.
- Allergy to standard treatment options.
- Patients with ano-rectal symptoms that may be STI-related.
- Complicated clinical situations for further management.

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SEXUAL HEALTH FOR ALL