# Aotearoa New Zealand STI Management Guidelines for Use in Primary Care

# Pelvic inflammatory disease

Overview

- A syndrome comprising a spectrum of inflammatory disorders of the upper female genital tract, including any combination of endometritis, salpingitis, tubo-ovarian abscess and pelvic peritonitis
- Clinical presentation varies widely in both severity and symptomatology, estimated up to 60% subclinical
- In addition to sexual transmission, pelvic inflammatory disease (PID) may follow intrauterine device (IUD) insertion, termination of pregnancy, child birth and upper genital tract instrumentation
- True incidence is unknown due to non-specificity of diagnostic signs
- Risk factors:
    - Age under 30 years
    - Partner with a sexually transmitted infection (STI)
    - Recent change in sexual partner
    - Recent STI
    - Recent pregnancy
    - Upper genital tract instrumentation
    - IUD insertion
- Prompt treatment is essential to prevent long term sequelae

Cause

- *Chlamydia trachomatis*, *Neisseria gonorrhoeae*, mycoplasmas and mixed anaerobes
- Polymicrobial
- Up to 70% of cases do not have an identifiable cause

Clinical presentation

| Symptoms | Comments/Considerations |
|---|---|
| Lower abdominal pain | Typically bilateral, may worsen with movement and may localise to one side. Pain may be described like period pain in character and distribution. |
| Dyspareunia | Deep |
| Vaginal/cervical discharge | Change in discharge, may be mucopurulent |
| Vaginal bleeding | Intermenstrual, postcoital or menorrhagia |
| Fever, nausea, vomiting | Indicate severe infection. Absence of these symptoms does not exclude a diagnosis of PID. |
| **Complications** | |
| Tubo-ovarian abscess<br>Chronic pelvic pain<br>Ectopic pregnancy and tubal factor infertility<br>Perihepatitis (Fitz-Hugh-Curtis syndrome) - rare | |

Indications for testing

- Lower abdominal or pelvic pain in woman, especially those with risk factors
- Risk factors:
    - Age under 30 years
    - Partner with an STI
    - Recent change in sexual partner
    - Recent STI
    - Recent pregnancy
    - Upper genital tract instrumentation
    - IUD insertion

Recommended tests

- Diagnosis is clinical, taking into account the history, clinical findings and supplemental tests
- No single laboratory test is diagnostic, and STI tests are often negative
- A low threshold for treatment is appropriate in view of important sequelae and diagnostic uncertainty

**Investigations**

- All women of reproductive age with new onset abdominal pain should have the following investigations:
    - Urine pregnancy test and, if positive, urgent pelvic ultrasound (exclude ectopic pregnancy)
    - STI screening as per sexual health check guideline
    - Urinalysis – the presence of nitrites or leucocytes plus prominent symptoms of dysuria and frequency makes urinary tract infection a possible differential diagnosis

- Initiate PID treatment for the following criteria
    - Lower abdominal pain AND one or more of the following:

  Uterine tenderness

  OR

  Adnexal tenderness

  OR

  Cervical motion tenderness

Bimanual examination is necessary to elicit cervical motion tenderness and adnexal or uterine tenderness. The inability to perform a bimanual examination should not alter making a provisional diagnosis and commencing treatment

**Additional supportive features:**

- Abnormal cervical or vaginal mucopurulent discharge
- Fever > 38 degrees
- Elevated white cell count or CRP
- Confirmed infection with an STI or bacterial vaginosis

PID is severe if:

- Acute abdomen
- Pregnancy
- Fever, vomiting or systemically unwell
- Intolerant of oral therapy
- Clinical failure at review

Main **differential diagnoses** to consider:

- Pregnancy complications, including ectopic
- Appendicitis
- Urinary tract infection
- Ruptured ovarian cyst

Management
Initiate PID treatment for the following criteria

- Lower abdominal pain AND one or more of the following:

Uterine tenderness

OR

Adnexal tenderness

OR

Cervical motion tenderness

**Treatment options**

| Infection | Recommended |
|---|---|
| Mild – moderate<br>Outpatient treatment | Ceftriaxone 500 mg intramuscular or intravenous injection, as a single dose<br>PLUS<br>Doxycycline 100 mg orally, twice daily for 14 days<br>PLUS<br>Metronidazole 400 mg orally, twice daily for 14 days |
| Severe PID | Refer for inpatient treatment |

**Special Situations**

| Situation | Recommendation |
|---|---|
| Complicated infection, poor response to treatment, or recurrent infection | Seek specialist advice |
| Poor adherence likely | Consider regimen as for pregnancy (not recommended first line) |
| Pregnancy and breastfeeding<br>NB PID is uncommon in pregnancy | Ceftriaxone 500 mg intramuscular or intravenous injection, as a single dose<br>PLUS<br>Azithromycin 1 g orally, and repeat dose 1 week later<br>PLUS<br>Metronidazole 400 mg orally, twice daily for 14 days |
| Allergy to principal treatment choice | Seek specialist advice |

- **Advise to abstain from sex or use condoms for 2 weeks from the start of treatment, and until partner(s) tested and treated**
- Rest and simple analgesia where required (non-steroidal anti-inflammatory medications, paracetamol)
- Consider removal of IUD if no response to treatment in 48-72 hours
- Consider admission if:
    - diagnosis uncertain
    - a surgical emergency cannot be excluded
    - suspicion or definitive diagnosis of a pelvic abscess
    - severe illness or poor response to outpatient therapy
    - intolerance to oral therapy

Partner notification and management of sexual contacts

- Contact tracing is important to prevent re-infection and reduce transmission

- All sexual contacts in the last 3 months should be notified
- Most patients choose to tell contacts themselves; giving written information can be helpful
- Notifying all contacts may not be possible e.g. if there is insufficient information or a threat of violence

**Management of sexual contacts**

- Contacts should have a sexual health check, and empirical treatment with **doxycycline 100 mg orally twice daily for 7 days**, assuming no allergies or contraindications
- Advise contacts to abstain from sex or use condoms until results are available, and treatment completed
- If index case or contacts test positive for an STI, see appropriate STI guideline for management
- Patient-delivered partner therapy is not legal in Aotearoa New Zealand

Follow up

| |
|---|
| Mild PID<br>• Review in **1-2 weeks**, to confirm resolution of signs and symptoms<br>Moderate PID<br>• Review in 24-72 hours<br>• Refer to gynaecology if not improving<br>• Discuss test results<br>• Ask if any condomless sex in the week post-treatment<br>• Check medication was completed and tolerated<br>• Ensure notifiable contacts have been informed<br>• Check if any risk of re-infection. Retreatment is necessary if re-exposed to an untreated positive contact |
| **Test of cure**<br>• Clinical review as above to ensure signs and symptoms have resolved |
| **Retesting**<br>• Re-infection is common<br>• Retesting at **3 months** is recommended, to detect re-infection |

Indications for specialist referral

**Referral to a specialist is recommended for:**

- Allergy or contraindication to standard treatment options

- Suspected PID in pregnancy
- Severe PID (consider inpatient management)
- Complicated clinical situations for further management

Auditable outcomes

- 100% of people diagnosed with PID have had investigations for gonorrhoea and chlamydia

Useful patient resources
Just the facts

---

**Endorsement:** These guidelines have been endorsed by the Blood Borne Viruses and Sexually Transmitted Infections Standing Committee (BBVSS).

**Developed by:** the Australasian Society for HIV, Viral Hepatitis and Sexual Health Medicine (ASHM) ABN 48 264 545 457 | CFN 17788

**Funded by:** The Australian Government Department of Health

**Disclaimer:** Whilst the Australian Department of Health provides financial assistance to ASHM, the material contained in this resource produced by ASHM should not be taken to represent the views of the Australian Department of Health. The content of this resource is the sole responsibility of ASHM. www.ashm.org.au