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 Chronic pelvic pain Ectopic pregnancy and tubal factor infertility 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 Outpatient treatment	Ceftriaxone 500 mg intramuscular or intravenous injection, as a single dose PLUS Doxycycline 100 mg orally, twice daily for 14 days PLUS 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 NB PID is uncommon in pregnancy	Ceftriaxone 500 mg intramuscular or intravenous injection, as a single dose PLUS Azithromycin 1 g orally, and repeat dose 1 week later PLUS 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 • Review in **1-2 weeks**, to confirm resolution of signs and symptoms Moderate PID • Review in 24-72 hours • Refer to gynaecology if not improving • Discuss test results • Ask if any condomless sex in the week post-treatment • Check medication was completed and tolerated • Ensure notifiable contacts have been informed • Check if any risk of re-infection. Retreatment is necessary if re-exposed to an untreated positive contact
Test of cure • Clinical review as above to ensure signs and symptoms have resolved
Retesting • Re-infection is common • 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).

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