

## Pelvic Inflammatory Disease (PID)

Pelvic inflammatory disease is the inflammation of pelvic structures above the cervical os.

Pelvic inflammatory disease (PID) is usually caused by an STI, particularly in women aged under 25 years, women who have had recent changes of sexual partner or women with a previous history of gonorrhoea or chlamydia trachomatis. But it can follow puerperal sepsis or abortion.

Gonorrhoea and Chlamydia trachomatis principally result in endosalpingitis, whereas puerperal and post-abortion sepsis results in exosalpingitis.

PID may be acute, subacute, acute on chronic, or chronic. Tuberculosis is another important cause of PID.

Common pathogens are Chlamydia trachomatis, Neisseria gonorrhoeae, and others

### Signs and Symptoms of pelvic inflammatory disease

**Acute PID** is diagnosed by:

- Lower abdominal pain usually starting soon after a menstrual period.
- Fever.
- Signs of pelvic [peritonitis](#) in the lower abdomen.
- Bilateral adnexal tenderness and positive cervical excitation on vaginal examination.
- The patient may be toxic with vomiting.

**Chronic PID** is diagnosed by:

- Chronic or recurrent lower abdominal pains
- Dyspareunia,
- Infertility
- Mucopurulent cervical discharge
- Bilateral adnexal tenderness
- [Adnexal induration](#) and/or masses (tubo-ovarian)

The diagnosis is mainly by clinical evaluation.

Tuberculosis is diagnosed by biopsy of the endometrial or the pelvic.

### Diagnostic Investigations

Diagnosis of PID is clinical, taking into account the history, clinical findings and results of tests.

- Urethral and cervical smears may be helpful in acute cases for Gram-stain and culture
- Hemoglobin levels
- Blood Smear for Malaria Parasites

- [Urinalysis](#)
- Venereal disease research laboratory testing

## Treatment

However, STI tests will often be negative and a low threshold for treatment is appropriate. Treatment should cover infection with gonorrhea, chlamydia, and anaerobes.

Hospital admission may be required for IV antibiotics.

*For acute pelvic inflammatory disease:*

Mild to moderate where the patient is not toxic and there are no features of peritonitis:

Oral amoxicillin/clavulanate 625mg 12 hourly for 7 days **OR** doxycycline 100mg BD for 7 days 12 hourly with PO metronidazole 400mg 8 hourly for 7 days; avoid Add PO ibuprofen 400mg 8 hourly and hyoscine butyl bromide 20mg PO 8 hourly for 5 days.

*Sexually transmitted infection-related PID:*

Give Amoxicillin 3g STAT + amoxicillin-clavulanate 625mg STAT + probenecid 1g+ doxycycline 500mg QDS for 10 days.

**In pregnancy** use erythromycin 500mg QDS for 10 days + metronidazole 400mg TDS for 10 days.

*Acute PID – Severe cases with toxicity and features of peritonitis:*

Start intravenous treatment with parenteral or oral analgesic, morphine 10mg IM PRN (3 doses), then change to PO ibuprofen 400mg TDS for 7 days.

IV crystalline penicillin 3 mega units 6 hourly **OR** ceftriaxone 1gm BD + IV gentamicin 80mg 8 hourly + metronidazole 500mg IV 8 hourly for 3–5 Then give PO metronidazole 400mg 8 hourly and doxycycline 100mg 12 hourly for 10 days and PO ibuprofen 400mg 8 hourly for 5 days.

Ornidazole may be considered as an alternative if metronidazole is not tolerated

If fever persists after 48–72 hours of antibiotic cover:

Perform a bimanual pelvic examination.

Confirm with a pelvic ultrasound. If there is a pelvic collection (bulge in a pouch of Douglas) and/or adnexal masses, a pelvic abscess is suspected and laparotomy for drainage done.

At laparotomy, do drainage and peritoneal toilet with warm saline; leave a drain in situ for about 3 days and continue parenteral antibiotics

## Chronic PID

Antibiotics as for mild to moderate acute

Spouse or sexual partner is also investigated and treated for

Admit in presence of Severe PID, which is indicated by Dehydration, Suspicion of an abscess, Febrile patient, Suspicion of induced abortion.

Acute PID if there is vomiting or when follow up cannot be guaranteed

## **Patient Education**

In the case of partner(s), trace and treat contacts and advise on condom use to avoid reinfection.