GENITAL TRACT INFECTIONS
Pelvic Inflammatory Disease (PID)

Signs and Symptoms: pelvic or lower abdominal pain (usually bilateral but can be unilateral), pyrexia, abnormal vaginal or cervical discharge (intermenstrual, postcoital, or 'breakthrough'), abnormal vaginal or cervical discharge, right upper quadrant pain, tenderness (adnexal, cervical motion, uterine).

- a pelvic examination will aid the diagnosis.

Investigation: Prior to initiation of treatment, it is essential to send triple swabs (i.e., cervical Amies swab for *Neisseria gonorrhoeae* culture; cervical or vulvovaginal swab for *Chlamydia trachomatis* NAAT; high vaginal Amies swab for microscopy/culture to exclude other vaginal infections, such as bacterial vaginosis and candidiasis). Latest guidance also recommends a cervical or vulvovaginal swab for *Mycoplasma genitalium* NAAT.

- negative swabs do not exclude a diagnosis of PID.

Urgent hospital assessment:

- The woman is pregnant or cannot rule out ectopic pregnancy
- Symptoms and signs are severe (nausea, vomiting, and fever greater than 38°C)
- Signs of pelvic peritonitis
- A tubo-ovarian abscess is suspected
- The woman is unwell and there is a diagnostic doubt
- A potential surgical emergency (e.g., acute appendicitis) cannot be ruled out
- The woman is unable to follow or tolerate an outpatient treatment regimen

Management:

- Ensure referral to an integrated sexual health service (ISHS) for further screening and contact tracing.
- Current and recent (within the last SIX months) partners should be contacted and offered advice, screening, treatment, and contact tracing via ISHS**.**
- Advise sexual abstinence (i.e., no oral or genital sex, not even with a condom) until both the woman with PID and her partner(s) have completed the course of treatment.

Ensure all appropriate microbiological tests have been taken before commencing treatment

Medication	Dose	Duration of Treatment
Gonorrhoea suspected (partner has it; sex abroad; severe symptoms), use regimen with ceftriaxone, as resistance to quinolones is high:		
Ceftriaxone *(add 1ml lidocaine 1% to each 250mg vial and give by **deep IM injection only**)* **PLUS** Metronidazole **AND** Doxycycline	1g IM *(dose increased to reflect reduced sensitivity)* 400 mg orally twice daily 100 mg orally twice daily	Single dose 14 days 14 days
Alternative, if not at risk of Gonorrhoea but note safety concerns:		
Metronidazole **PLUS** Ofloxacin (Levofloxacin may be used as a more convenient alternative to ofloxacin) **OR** *if allergic to metronidazole* Moxifloxacin *(moxifloxacin is the recommended treatment if Mycoplasma genitalium is positive due to good microbiological activity)*	400mg orally twice daily 400mg orally twice daily (500mg orally once daily) 400mg orally once daily	14 days 14 days (14 days) 14 days
Alternative regimen: NOT the preferred regimen, as less evidence. Only use when the treatments above are not suitable, e.g., in cases where doxycycline or quinolones are contraindicated, allergy or intolerance.		
Ceftriaxone **PLUS** Azithromycin	1g IM 1g oral once weekly	Single dose 2 weeks (on day 1 and day 8)

- Increasing resistance of *N. gonorrhoeae* to quinolones, locally >5%, means that they can *no longer be used for empirical treatment.*
- Using doxycycline and metronidazole alone is not recommended due to poor cure rates.
- **PHE no longer recommend oral cefixime due to increasing resistance rates.**
- Ceftriaxone IM is recommended by BASHH on the basis of the evidence available**.** The **dose of ceftriaxone has been increased to 1g stat to reflect the reduced sensitivity of *Neisseria gonorrhoeae* to cephalosporins and the increase in azithromycin resistance** as per updated national BASHH UK treatment guidelines for uncomplicated gonorrhoea.

Follow-up:

- Initial testing for gonorrhoea positive – repeat testing should be routinely performed after 2-4 weeks
- Initial testing for chlamydia was positive – repeat testing after 3-5 weeks post-treatment
- Initial test for *Mycoplasma genitalium* was positive – repeat testing performed after about 4 weeks post-treatment.

Patient information:

- NHS: Pelvic Inflammatory Disease
- The British Association for Sexual Health and HIV: A guide to Pelvic Inflammatory Disease (PID)
- The Royal College of Obstetricians and Gynaecologists: Information for you: Acute PID

Pelvic Inflammatory Disease			
Version	Author(s)	Date	
V2.1	Shary Walker, Interface and Formulary Pharmacist	05.01.23	* Signs and symptoms, Investigation, Urgent hospital assessment, Management, Follow-up, and Patient information added. * Added levofloxacin as an alternative antibiotic, ceftriaxone + azithromycin regimen. * Formatting, abbreviations expanded, BASHH hyperlink updated, other useful links added