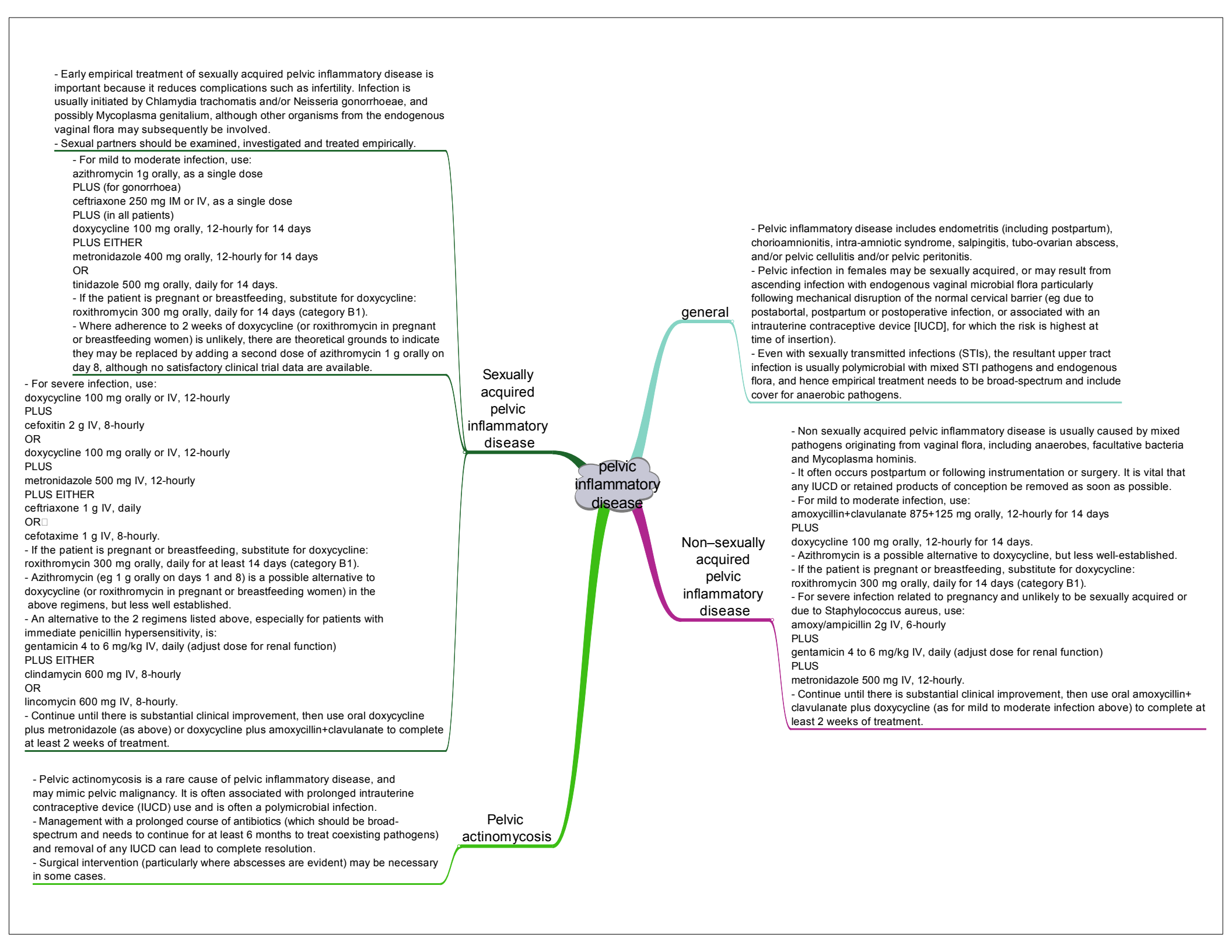
pelvic inflammatory disease
general
- Pelvic inflammatory disease includes endometritis (including postpartum), chorioamnionitis, intra-amniotic syndrome, salpingitis, tubo-ovarian abscess, and/or pelvic cellulitis and/or pelvic peritonitis.
- Pelvic infection in females may be sexually acquired, or may result from ascending infection with endogenous vaginal microbial flora particularly following mechanical disruption of the normal cervical barrier (eg due to postabortal, postpartum or postoperative infection, or associated with an intrauterine contraceptive device [IUCD], for which the risk is highest at time of insertion).
- Even with sexually transmitted infections (STIs), the resultant upper tract infection is usually polymicrobial with mixed STI pathogens and endogenous flora, and hence empirical treatment needs to be broad-spectrum and include cover for anaerobic pathogens.
Sexually acquired pelvic inflammatory disease
- Early empirical treatment of sexually acquired pelvic inflammatory disease is important because it reduces complications such as infertility. Infection is usually initiated by Chlamydia trachomatis and/or Neisseria gonorrhoeae, and possibly Mycoplasma genitalium, although other organisms from the endogenous vaginal flora may subsequently be involved.
- Sexual partners should be examined, investigated and treated empirically.
- For mild to moderate infection, use:
azithromycin 1g orally, as a single dose
PLUS (for gonorrhoea)
ceftriaxone 250 mg IM or IV, as a single dose
PLUS (in all patients)
doxycycline 100 mg orally, 12-hourly for 14 days
PLUS EITHER
metronidazole 400 mg orally, 12-hourly for 14 days
OR
tinidazole 500 mg orally, daily for 14 days.
- If the patient is pregnant or breastfeeding, substitute for doxycycline:
roxithromycin 300 mg orally, daily for 14 days (category B1).
- Where adherence to 2 weeks of doxycycline (or roxithromycin in pregnant or breastfeeding women) is unlikely, there are theoretical grounds to indicate they may be replaced by adding a second dose of azithromycin 1 g orally on day 8, although no satisfactory clinical trial data are available.
- For severe infection, use:
doxycycline 100 mg orally or IV, 12-hourly
PLUS
cefoxitin 2 g IV, 8-hourly
OR
doxycycline 100 mg orally or IV, 12-hourly
PLUS
metronidazole 500 mg IV, 12-hourly
PLUS EITHER
ceftriaxone 1 g IV, daily
OR
cefotaxime 1 g IV, 8-hourly.
- If the patient is pregnant or breastfeeding, substitute for doxycycline:
roxithromycin 300 mg orally, daily for at least 14 days (category B1).
- Azithromycin (eg 1 g orally on days 1 and 8) is a possible alternative to doxycycline (or roxithromycin in pregnant or breastfeeding women) in the above regimens, but less well established.
- An alternative to the 2 regimens listed above, especially for patients with immediate penicillin hypersensitivity, is:
gentamicin 4 to 6 mg/kg IV, daily (adjust dose for renal function)
PLUS EITHER
clindamycin 600 mg IV, 8-hourly
OR
lincomycin 600 mg IV, 8-hourly.
- Continue until there is substantial clinical improvement, then use oral doxycycline plus metronidazole (as above) or doxycycline plus amoxycillin+clavulanate to complete at least 2 weeks of treatment.
Non–sexually acquired pelvic inflammatory disease
- Non sexually acquired pelvic inflammatory disease is usually caused by mixed pathogens originating from vaginal flora, including anaerobes, facultative bacteria and Mycoplasma hominis.
- It often occurs postpartum or following instrumentation or surgery. It is vital that any IUCD or retained products of conception be removed as soon as possible.
- For mild to moderate infection, use:
amoxycillin+clavulanate 875+125 mg orally, 12-hourly for 14 days
PLUS
doxycycline 100 mg orally, 12-hourly for 14 days.
- Azithromycin is a possible alternative to doxycycline, but less well-established.
- If the patient is pregnant or breastfeeding, substitute for doxycycline:
roxithromycin 300 mg orally, daily for 14 days (category B1).
- For severe infection related to pregnancy and unlikely to be sexually acquired or due to Staphylococcus aureus, use:
amoxy/ampicillin 2g IV, 6-hourly
PLUS
gentamicin 4 to 6 mg/kg IV, daily (adjust dose for renal function)
PLUS
metronidazole 500 mg IV, 12-hourly.
- Continue until there is substantial clinical improvement, then use oral amoxycillin+clavulanate plus doxycycline (as for mild to moderate infection above) to complete at least 2 weeks of treatment.
Pelvic actinomycosis
- Pelvic actinomycosis is a rare cause of pelvic inflammatory disease, and may mimic pelvic malignancy. It is often associated with prolonged intrauterine contraceptive device (IUCD) use and is often a polymicrobial infection.
- Management with a prolonged course of antibiotics (which should be broad-spectrum and needs to continue for at least 6 months to treat coexisting pathogens) and removal of any IUCD can lead to complete resolution.
- Surgical intervention (particularly where abscesses are evident) may be necessary in some cases.