



Mycoplasma

(i) Mycoplasma pneumoniae:

- classic cause of a febrile illness with atypical pneumonia and rarely otitis media and sinusitis, rashes (eg Stevens Johnson & erythema nodosum), pancarditis, neurological (eg transverse myelitis, aseptic meningitis & Guillain Barre) and haematological manifestations (eg haemolytic anaemia, cold agglutinins with a procoagulant state)

(ii) Mycoplasma hominis:

- causes pyelonephritis, pelvic inflammatory disease & post partum fever
 (iii) Ureaplasma urealyticum and Mycoplasma genitalium causes non gonococcal urethritis

Chlamydomphila spp. (previously known as Chlamydia)

(i) Chlamydomphila pneumoniae

- causes community acquired pneumonia and, less often, meningoencephalitis, arthritis, myocarditis & Guillain Barre

(ii) Chlamydomphila psittaci

- transmitted from infected birds (usually parrots) to humans and causes psittacosis, a febrile illness with pneumonia, splenomegally & a non-specific rash

(iii) Chlamydomphila trachomatis

- common cause of pelvic inflammatory disease and trachoma (the most common cause of blindness worldwide (although most cases of eye disease occur in the tropics

obligate intracellular organisms

other specific infections

Melioidosis

- caused by an aerobic gram negative bacillus (*Burkholderia pseudomallei*)
- acquired from the soil north of Rockhampton in Australia, especially during the wet season and in the Asia-Pacific region
- causes pneumonia & abscesses, especially in the spleen, prostate & skin
- increased risk in alcoholics and diabetics
- treated with cotrimoxazole plus meropenem or ceftazidime

Salmonella

- Salmonella spp include *S. typhi*, *S. paratyphi*, *S. enteridis*, *S. choleraesuis*
- aerobic gram negative bacilli
- faecal oral spread
- causes enteric (typhoid) fever
- features include fevers, shock with relative bradycardia, abdominal pain, diarrhoea & then constipation, gastrointestinal bleeding & ileal perforation, rose spots on the trunk, hepatosplenomegaly
- increased risk of severe metastatic disease in asplenia and sickle cell disease
- treated with ciprofloxacin, ceftriaxone or azithromycin

bacillus anthracis

- aerobic gram positive spore forming bacilli
- cause acute infectious zoonosis & potential agent in bioterrorism
- transmitted from inhalation, ingestion or contact with spores or skin lesions
- disease patterns include:
 - (i) pulmonary - haemorrhagic mediastinitis with lymphadenopathy & cardiorespiratory collapse
 - (ii) cutaneous - depressed black eschars
 - (iii) gastrointestinal tract - bloody dysentery with shock