ENTERIC FEVER

- Gradual onset of sore throat, cough, diarrhoea/ constipation.
- Rose spots, relative bradycardia, splenomegaly, abdominal pain and distension.
- Step rising pattern of fever.
- Leucopenia; blood, urine and stool culture positive for salmonella.
- *Complications* include intestinal haemorrhage and perforation, pneumonia, myocarditis, encephalopathy, nephropathy, cholecystitis, osteomyelitis and psychosis.
- *Treatment* is with ciprofloxacin 750 mg bid or ceftriaxone 2 gm daily for 5–10 days. Amoxycillin, sparfloxacin, ofloxacin are equally effective so also chloramphenicol.
- Prevention is by multiple dose oral vaccine or single dose parenteral vaccine.

SHIGELLOSIS

- Diarrhoea with blood and mucus, small quantity, tenesmus.
- Crampy abdominal pain and systemic toxicity.
- White blood cells and RBC in stool; organism isolated on stool culture.
- *Treatment* is by rehydration and prevention of hypotension and renal failure; cipofloxacin 750 mg bid; TMP-SMX Ds 1 bid for 3 days.

CHOLERA

- Voluminous diarrhoea; stool is liquid, gray, turbid and without fecal odor, blood or pus (rice water stool).
- Rapid development of marked dehydration.
- Positive stool culture.
- *Treatment* is replacement of fluids by Ringer lactate and normal saline along with fluoroquinolones,

AMOEBIC MENINGOENCEPHALITIS

- Caused by *Naegleria flowlere* with fulminating haemorrhagic necrotising meningoencephalitis which is rapidly fatal.
- CSF shows leukocytosis and amoebas can be recovered from it.
- *Treatment* is with amphotericin B plus rifampicin.
- Acanthamoeba cause granulomatous multifocal chronic necrotising encephalitis, skin lesions resembling deep fungal infection and keratitis. *Treatment* is with ketoconazole, amphotericin, itraconazole, pentamidine, fluocytosine, etc. but mostly ineffective. Keratitis may respond to topical propamidine isethionate (0.1%), polyhexamethylene biguanide, chlorhexidine digluconate and oral itraconazole.

BABESIOSIS

- Causative agent is *Babesia microti*, often coinfecting with Lyme disease and ehrlichiosis; most severe in immunosuppressed.
- The illness is characterised by irregular fever, chills, headache, diaphoresis and often with hepatosplenomegaly, haemoglobinuria, haemolytic anaemia and thrombocytopenia.
- Diagnosis is based on discovery of parasite within RBC.
- *Treatment* is with quinine 650 mg tid for 7 days plus clindamycin 650 mg tid or azithromycin 500 mg bid for 7 days plus atovaquone 750 mg twice daily for 7 days.

BALANTIDIASIS

- Causative agent is *B. coli*, a large ciliated intestinal protozoa.

dyspnoea, hepatosplenomegaly); (3) chronic progressive pulmonary histoplasmosis with apical cavities, mediastinal lymphadenopathy; (4) disseminated disease in immunosuppressed.

- Mild to moderate disease is treated with itraconazole 200–400 mg/d PO and severe disease with amphotericin B.

CRYPTOCOCCOSIS

- Causative agent *C. neoformans*, an encapsulated budding cyst, most common cause of fungal meningitis, obstructive hydrocephalus may occur.
- Oral fluconazole 400 mg PO daily for 10 weeks in moderate disease and amphotericin B IV for 14 days followed by fluconazole for severe disease, e.g. HIV patients be given.

ASPERGILLOSIS

- Caused by *A. fumigatus, A. nijar.*
- Allergic bronchopulmonary aspergillosis manifests with bronchospasm, fleeting pulmonary infiltrates with eosinophilia, high IgE and aspergillus precipitins in blood; can lead to saccular bronchiectasis and fibrotic lung disease; treated with prednisolone 1 mg/kg/d tapered over several months along with itraconazole 200 mg daily for 10 weeks.
- Aspergilloma formation in existing pulmonary cavities causes haemoptysis; treatment is surgical resection.
- Invasive aspergillosis occurs in immunocompromised with severe necrotising pneumonia, ulcerative tracheobronchitis, meningoencephalitis etc.
- *Treatment* of invasive aspergillosis is with amphoterisin B 0.8–1.5 mg/kg/day IV up to total dose of 2 gm, capsofungin 50 mg IV daily may be added. For less severe disease oral itraconazole 200–400 mg/day PO.

it is due to focal and segmental glomerulosclerosis. In membranous nephropathy there is dense deposit in subepithelium; not responding to therapy in membrano proliferative form there is dense deposit in subendothelium.

- Renal biopsy is indicated in children not responding to therapy and in adults prior to therapy.

Treatment

- Prednisolone 1 mg/kg/day 4–6 weeks in children and upto 16 weeks in adults or till complete remission of proteinuria followed by gradual withdrawal. Patients with frequent relapse or steroid resistance need cyclophosphamide or chlorambucil. Best response is in minimal change disease.
- Supportive therapy — low salt diet, strict control of blood pressure, ACE inhibitors, high protein diet.

DISEASES WITH NEPHRITIC AND NEPHROTIC COMPONENTS

Renal involvement in SLE has 5 histologic patterns – type I (normal), type II (mesangial proliferative), type III (focal and segmental proliferative), type IV (diffuse proliferative), type V (membranous nephropathy). While type I and type II need no treatment, type III and type IV need aggressive immunosuppressive therapy. Type V when is superimposed on proliferative lesions needs treatment. Cyclophosphamide IV monthly for six months and then every 3 months for six doses is recommended along with methyl prednisolone 1gm IV daily for 3 doses and then oral prednisolone. Membranoproliferative (thick basement membrane) GMN has two forms – type I and type II. Type I is associated with upper respiratory infection with C_3, IgM, IgG deposit in granular pattern but in type II only there is C_3 deposit (C_3 nephritic factor). Type I presents with nephritic syndrome and less common