INPATIENT CARE OF THE CHILD WITH HIV/AIDS
Extra care for children needing admission

Pneumocystis carinii Pneumonia (PCP)

Acute Respiratory Infections in infants with known or suspected HIV infection are likely to be PCP. Hypoxia is a significant feature. Any child with severe hypoxia should have a rapid test to ascertain HIV exposure

Diagnosing PCP on the CXR is not easy and can vary from air trapping to segmental consolidation to bilateral white outs (any picture is possible!)

1) Give OXYGEN if necessary.
2) If the child needs oxygen give PREDNISONE 2 mg/kg 24H PO x 5 days, then 1 mg/kg 24H x 5 days, then 0,5 mg/kg 24H x 5 days. If NPO, give DEXAMETHAZONE 0,15mg/kg 6H IV; change to oral prednisone when possible.
3) Give high dose COTRIMOXAZOLE for 21 days
   - intravenously: 0,9 ml/kg (in 10ml/kg 5%DW) stat then 0,45 ml/kg 6H (in 5ml/kg 5% DW): IV cotrimoxazole should be given over 1 hour (doses based on solution containing TRIMETHOPRIM 80mg and SULPHAMETHOXAZOLE 400mg per 5ml)
   - per os: 3,75 ml/kg stat then 1,25 ml/kg 6H
4) Because PCP infection is often accompanied by a bacterial infection (see ARI guideline), give IVI AMPICILLIN and GENTAMICIN (consider CLOXACILLIN if staphylococcus aureus is suspected)

It seems more effective to treat aggressively from the start with IV’s rather than orals.
Once the child is improving he/she can be changed to oral COTRIMOXAZOLE and AUGMENTIN 15 mg/kg 8H
If intravenous COTRIMOXAZOLE is not available, use high dose oral COTRIMOXAZOLE from the start (as above)

Chest infections not responding to usual treatment
- Investigate for TB by taking a history and doing a Tine (in HIV, a Tine is positive if > Grade I) and gastric washings or induced sputum to be sent for AFB, AND FOR culture and sensitivity (minimum 3 specimens)
- Even if there is no positive evidence of TB and if there are persistent CXR abnormalities despite three weeks of broad-spectrum antibiotics (e.g. amoxil for 10 days then erythromycin for 10 days) a trial of TB treatment should be considered
- Contact tracing should be aggressively done, chest x-ray and sputa must be done to any potential case
- TB and LIP are difficult to distinguish apart – ask for help from a senior colleague, ask to an HIV expert if any doubt
- Follow the National TB Guidelines

Other Bacterial Infections
- Children who are infected with HIV and who need admission for suspected bacterial sepsis (gastro / ARI etc) are at higher risk of invasive infections than HIV negative children. Aggressive antibiotic therapy should be considered ab initio.
- An attempt should be made to identify the organism by taking cultures of blood, stool, urine, CSF and pus as appropriate before starting antibiotic therapy.

Candida Albicans Infections
- Severe candida infections are often resistant to topical therapy and FLUCONAZOLE 5 mg/kg 24H for 7 days is usually very effective, followed by ongoing topical therapy
- Children with stridor and oral thrush have probable candida LTB (this seems to carry a poor prognosis)
- For mild oral candida, smear NYSTATIN CREAM 6H in the mouth, rather than use the drops
Disseminating Varicella-Zoster infections

- Chickenpox and shingles are potentially lethal in HIV-infected children
- All should receive ACYCLOVIR 5-10 mg/kg 8H IVI or 5 x per day orally
- Severe or extensive Herpes simplex may also need treatment with ACYCLOVIR

Cryptococcal meningitis

- AMPHOTERICIN B 0.7-1mg/kg 24H IV diluted in 5% dextrose by slow infusion over 4 hrs, for 2 weeks, followed by maintenance therapy of FLUCONAZOLE 12 mg/kg 24H during 8 weeks than 5 mg/kg 24H lifelong or until immune reconstitution after HAART
- If amphotericin B is not available: FLUCONAZOLE 12 mg/kg 24H for 10 weeks followed by secondary prophylaxis (5 mg/kg 24H lifelong, or until adequate immune reconstitution on HAART)
- Serial LPs to decrease intracranial pressure < 20 cm H2O
- Analgesia

Access to Antiretroviral Therapy

- Every effort must be done to facilitate the access to ARVs for the children who are eligible:
  - WHO staging and CD4 must be done
  - Liaison with ARV clinic and start of adherence training should be initiated as soon as possible
  - Social and dietitian support must be offered. The goal is to be able to start ARVs on discharge if indicated
  - Use the HIV testing and staging sheet to guide your comprehensive HIV care plan
- If a child is on antiretroviral therapy:
  - Make sure this continues during the admission
  - Remember to consider drug interactions
  - NEVER stop antiretroviral therapy without first seeking the advice of an HIV expert

IRIS

- Paradoxical clinical deterioration after initiation of HAART must be discussed with an HIV expert.

Every admission should be regarded as an OPPORTUNITY for accessing antiretroviral therapy. Don’t miss this opportunity. The child’s life depends on you.