AMBULATORY CARE OF THE CHILD LIVING WITH HIV/AIDS

Improving quality of life through basic health measures

HIV/AIDS is a major child health problem

- The incidence of HIV infection in antenatal women in the Province of KZN was about 30% in 2001. With no vertical transmission intervention, about 33% of their babies will contract HIV infection.
- PMB delivers about 17000 babies per year. Approximately 5100 babies are born yearly who are perinatally exposed to HIV infection. Of those about 1700 (without MTCT) will be infected, 850 with effective MTCT. So, we should be seeing about 1000 new HIV infected children per year in PMB.
- In the under 2's, AIDS accounts for about 25-50% of admissions.

HIV infection is a major health problem facing children and their carers in our region. Even before initiating anti-retroviral drugs basic health measures can make a difference to the quality and duration of their lives.

Should a mother who is HIV-infected breastfeed her child?

- Breastfeeding carries an additional transmission risk of 14% to 50%
- A mother who can afford infant formula and has access to safe water should be advised not to breastfeed
- If a mother is poor and from an area without access to safe water, the risks of not breastfeeding may outweigh the risks of breastfeeding in terms of an increased risk of malnutrition, gastro, ARI’s and other infections

According to National Policy, free formula feeds SHOULD be available at all clinics. Therefore poor mothers SHOULD be given this option. This is a human rights issue.

What other nutritional aspects are important?

1) Calorie intake

All children with HIV infection are at risk of failing to thrive

1) Give an age appropriate nutritious and balanced diet
2) Useful advice to poor mothers is to add a spoon or two of fat (margarine or cooking oil) to the child’s food to increase nutritional density
3) Monitor and intervene early. Refer all children with HIV/AIDS to Nutrition Support Programmes in your area for nutritional supplements i.e. milk and vitamins

2) Micronutrients

Vitamin A
Vitamin A as in EPI (Extended Programme of Immunisation), and thereafter 200 000 IU 6 monthly > 1 year of age

Other Vitamins
Give the standard dose of a multivitamin daily from birth

Folate
Folate 2.5 mg per day may be of benefit in symptomatic patients

Iron
If inadequate intake give prophylactic Fe to prevent Iron deficiency (Elemental iron 3 mg/kg/day)

3) Practical Feeding Advice

HIV infection is often accompanied by a loss of appetite due to chronic ill health and painful swallowing. (mouth ulcers, oral thrush). The following hints may be useful:

Anorexia:

- Frequent small meals (5 - 8 per day)
- Appetite is usually bigger in the morning so plan bigger meals in the morning
- Ensure all fluids are calorie-containing: juices, milk etc (not water)
- Always have favourite foods available and "bribe" the child if necessary to eat less favoured foods
- Company promotes appetite so make meals a social occasion and encourage activity
Painful Eating:
- Soft non-acidic foods of even consistency i.e. mashed potatoes and chicken
- Cold liquids help to numb the mouth
- Avoid salty, spicy or acidic foods i.e. pickles
- Good oral hygiene to reduce oral infection
- Local anaesthetic e.g. TeeGel
- Treat oral candida infections

What infection prophylaxis should be given?

1) **Pneumocystis Carinii Pneumonia (PCP)**
   - PCP is one of the biggest killers of HIV-infected infants. PCP will be the presenting illness in many infants. Prophylaxis is possible and CHEAP. Antenatal screening for HIV infection is important because it will identify at risk infants.
   - Identify at risk infants (antenatally preferably, but in our setting the infants usually present with clinical signs of HIV infection)
   - Start PCP prophylaxis at 6 weeks of age (i.e. at the same visit as first vaccine)
   - Cotrimoxazole prophylaxis should be continued until 1 year of age unless the infant is proven to be HIV negative (See ART Site Manual)
   - After 1 year of age if the child is completely asymptomatic, cotrimoxazole can be discontinued. Any child who has symptomatic HIV infection should be continued on cotrimoxazole prophylaxis for life unless CD4 counts are monitored.
   - The recommended dose of cotrimoxazole is 5mg/kg/day of the trimethoprim component daily. This is practically just under 1ml/kg/day of the cotrimoxazole: trimethoprim 40mg/5 ml.

2) **Tuberculosis Prophylaxis**
   - Ask carefully about household TB contacts
   - If there is a contact, exclude TB (Skin test, CXR and gastric washings for AFB's) and treat according to national guidelines (INH/RIF for 3 months)
   - A child suspected as having HIV infection with a reactive tine (induration of 2 mm of any of the 4 puncture sites or a mantoux induration of 5 mm) who has no clinical evidence of TB and has a normal CXR will also need 3 months of INH/RIF

3) **Measles and Chickenpox prophylaxis**
   - Measles: prophylactic immunoglobulin (0.5ml/kg) within 5 days of exposure to measles
   - Chicken pox: zoster immune globulin (0.15ml/kg) within 3 days of exposure chickenpox

4) **Immunisations**
   - Children with HIV infection should receive all the routine childhood immunisations
   - Babies born to HIV positive mothers should get BCG at birth
   - BCG should not be given to infants with symptomatic HIV infection
   - Avoid measles immunisation only in severely immunosuppressed patients. Give the second measles at 12 months instead of 18 months as the immune system may be more competent at 12 months of age
   - Yearly influenza vaccine is probably of benefit and should be given

5) **Deworming**
   - De-worm with mebendazole 6 monthly, after the age of ambulation

**Follow up**
- All newborns born of HIV infected mothers should start Cotrimoxazole prophylaxis at their “first vaccine visit” at 6 weeks of age
- Asymptomatic children (mother is HIV infected) can be seen 3 monthly at their local clinic
- Symptomatic children should be seen monthly at focused outpatient clinics

**Outpatient management of common paediatric problems in children living with HIV**

Children with HIV infection and intercurrent infections and other minor problems should be managed no differently from uninfected children. However HIV infected children are prone to more serious, prolonged and recurrent infections and their mothers should be advised to come back if there is no improvement on outpatient treatment.