Integrated Case Management Guidelines:

Meningitis

PAWC(MCWH): Provincial Reference Group 1999

MANAGEMENT OF CHILDREN WITH MENINGITIS

This is a guide for health workers at primary health care clinics.

SUSPECT MENINGITIS

- In a child who is severely ill, or unconscious, or who has a high fever, without an obvious cause.
- If there is a recent history of poor feeding, vomiting, fever irritability, convulsions or depressed level of consciousness.
- In a young infants with a history of lethargy, apnoea or poor sucking.
- In older children complaining of photophobia, headache and stiffness of the neck.

LOOK FOR

• Danger signs:	not able to drink, convulsions, abnormally sleepy/ difficult to wake, in a young infant temperature > 37.5°C or <35.5°C.
• Signs of shock	tachycardia, pulses difficult to feel, cold peripheries, capillary filling time > 4 seconds
• Specific signs of meningitis	neck stiffness and irritability bulging fontanelle in an infant
• Rash	petechial or purpuric rash, that does not blanch, indicative of meningooccal disease

Many young children with meningitis only have non-specific signs of general illness.

SUSPECT MENINGITIS - GIVE ANTIBIOTICS – STABILISE AND REFER URGENTLY TO HOSPITAL

TREATMENT

- Treat convulsions and shock if present (see page 2).
- Start antibiotic treatment immediately.
- Delay in the treatment of meningitis can lead to permanent brain damage.
- In areas where malaria is common, give a stat dose of malaria treatment.
- Refer to hospital immediately.

ANTIBIOTIC TREATMENT

- Ceftriaxone 100mg/kg stat dose intravenous or intramuscular- drug of choice (ceftriaxone is on the EDL and should be available at all clinics).
- If ceftriaxone not available:
  Penicillin G 100 000u/kg stat dose intravenous or intramuscular **plus**
  Chloramphenicol 25mg/kg stat dose intravenous or intramuscular (or even orally).
  (Use half the dose of penicillin and chloramphenicol in infants younger than 2 weeks.)

TREATMENT OF CONVULSIONS

- Diazepam rectally - 5mg if less than 1 year of age or 10 mg if older than a year.
- Repeat after 10 minutes if still convulsing.
- If convulsions continue give phenobarbitone 15 - 20mg/kg stat dose intravenous or intramuscular (max initial dose 200mg).
- Check blood glucose (see below) and blood pressure.
- Control fever with paracetamol (orally or by nasogastric tube) and tepid sponging.

MANAGEMENT OF SHOCK

- Stabilize patient before referral – give fluids and oxygen.
- Put up a drip (or an intraosseus line) and give repeated boluses of Saline or Ringers Lactate (10ml/kg at a time - maximum of 40ml/kg), until pulses are felt more easily.
- This is especially important in meningococcal disease.

GENERAL SUPPORTIVE CARE

- If vomiting or unable to feed, give maintenance fluids containing 10% dextrose.
- Do heel prick or finger prick blood glucose estimation to check for hypoglycaemia - If blood glucose < 2.6 mmol/l give 10% dextrose solution: 2-4 mls/kg intravenous bolus or 10ml/kg via a nasogastric tube. Repeat the test after 15 minutes. Continue with maintenance fluid 75ml/kg/day.

PROPHYLAXIS

- Household and close contacts (class at school or creche) of patients with meningococcal disease must be given prophylaxis to prevent secondary cases.
- Give rifampicin: < 1 month 5 mg/kg 12 hourly for 2 days
  1 month to 12 years 10mg/kg 12 hourly for 2 days
  adults 600mg 12 hourly for 2 days.

GOOD MANAGEMENT OF PATIENTS WITH SUSPECTED MENINGITIS PREVENTS DEATH AND DISABILITY, AND SAVES PRECIOUS HEALTH RESOURCES.

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