

## Department of Health Services, Kerala State

PH Division, Directorate of Health Services & State H1N1 Control Room

### **Management Guidelines for Short Febrile Illness**

#### **including ILI**

The points mentioned below are to be considered as a diagnostic and management aide. This aide is intended not to replace/bypass a systematic examination of the patient, but to help you to rapidly focus on the commonest priorities/ issues

The term 'Short Febrile Illness' is to be preferred to the earlier used general term 'Viral Fever', for fevers less than 7 days duration.

#### **The management of patients with Short Febrile Illness is based on**

1. Prompt OP based differential diagnosing/ screening of such patients for specific communicable diseases.
2. Appropriate use of paracetamol (other antipyretics if specially indicated) .
3. Investigations if indicated.
4. Supportive care
5. Reporting to the IDSP system
6. Advice to relatives/ public.
7. Judicious follow-up.

#### **General approach to Short Febrile Illness---based on time of arrival of patient and onset of fever**

- First day of fever----- history + supportive care
- Fever more than 3 days-----may need investigation based approach
- Partly treated fever----- investigation based approach

**First day initiation of treatment ( without waiting for investigation/results) as per existing specific disease protocols may be needed in any of these situations**

### First day ( 1-3day ) fever for any patient

Check, **and record** vital signs.....and suspect-

PR/HR -tachycardia out of proportion to fever (expect 10 beats increase per deg F rise, or 18 bts/deg C, of temperature )	Myocarditis
RR- tachypnoea out of proportion to fever (Normal RR 16-24/min. Any RR above 30 /min- view with caution) In children view with caution any RR > 60 upto 2 months, > 50 -2mo to 1 yr , > 40 -1yr to 5 yr, and > 30 in older children	Broncho pneumonia
Altered sensorium	A E S – Acute Encephalitis Syndrome (Meningitis , Encephalitis)
BP – always check in any unduly sick patient	Impending shock
Infants and children—observe for unconsolable cry, poor activity, sick look, and ‘toxic’ appearance. Ask about feeding, urine output	Sepsis

**First day fever** - Common foci of infection - look for the following

1. Meningitis ( neck stiffness in adults, altered sensorium/tense/bulging anterior fontanelle in children)
2. Pneumonia ( Tachypnoea/additional signs.. Xray signs only by Day-3)
3. UTI –( rigor and chills)
4. Cellulitis & Sepsis (local examination)

### Approaches

- With focus -----investigate and manage appropriately
- **Without focus ----**
  - With upper respiratory symptoms -Sore throat, rhinorrhoea, sneezing --- ILI, ARI, SARI—manage as per ABC guidelines in children, consider pertussis and diphtheria )
  - Without upper respiratory symptoms---- Consider Dengue fever , Malaria, Leptospirosis, Chikungunya, etc
  - With rash--- think of Measles, Dengue, IMN, Rubella..

### Specific diagnostic pointers/hints with Public Health perspective

1. First consultation with fever and conjunctival congestion / jaundice / severe myalgia / **muscle tenderness** +/- ‘high risk job’—? leptospirosis -- (Consider Doxycycline)
2. Fever and severe myalgia /conjunctival congestion/rash ? Dengue
  - (Dengue rash — can be either a flushed appearance /petechiae like /measles like (but keep in mind possibility of a drug rash too)
3. Fever with chills and rigor, especially on alternate days, splenomegaly /migrant patient — consider malaria, and use the treatment protocol
4. Fever with a rash, toxic febrile look, no response to usual antibiotics ---look for the eschar...? Scrub typhus- consider appropriate investigations and Doxycycline

**Actions if you suspect 'something unusual' in a patient in a crowded OPD, but want more time for a detailed examination**

1. The patient should be segregated, and re-examined. In the meanwhile --
2. Give symptomatic treatment for fever- single dose oral paracetamol (*avoid injections*),
3. Orally hydrate
4. Check BP(in adults) ( in children look for perfusion – sensorium, color and temperature of extremities, Capillary Refill Time( normal < 3 sec )—
5. If you strongly suspect myocarditis/ ARDS/ Encephalitis ? –Refer the patient to higher centre

**Investigation aide- When to test, Whom to test and Which tests..**

1. First three days--usually investigations are not required unless it is definitely indicated
2. Uncomplicated/ not sick – Short Febrile Illness / ILI –no need for investigation
3. If the patient looks 'sick', or has '**unusual**' symptoms at any time--- do appropriate investigation.
4. If your area has reports of any specific/ endemic diseases (Lepto/ Malaria/ DF/ AES/ scrub typhus)—specifically screen for such diseases among patients coming from such areas
5. Always communicate to the patient/relatives why you decide to investigate/not investigate, at that point of time.

**Control of the fever**

1. Tepid Sponging is very useful
2. Paracetamol is the recommended antipyretic .
3. Common formulations are
  - a. tablets of 500, 650 and 1000 mg,
  - b. syrups of 120, 125, 178, and 250mg per 5 ml,
  - c. drops of 100mg/ml.
  - d. Suppositories of 80/170/250 mg
  - e. In addition various 'cold remedies' contain additional 150mg/ml, 125 mg/5ml or 500 mg /tab, of paracetamol
4. Recommended adult dose is 500-1000 mg q8h, max 4000 mg /day.
5. In children, the recommended dose is 10-15 mg/ kg/dose, q4- 6 h orally.
6. Therefore, it is recommended that the formulation, quantity( in ml rather than drops/ teaspoons in case of children) and frequency of dosing are clearly mentioned in the prescription, as well as explained to the patient /parents
7. ***Injection Paracetamol has no clinical superiority to oral route***, and is to be strongly discouraged, for the following additional reasons.
  - a) Chance of allergic reactions.
  - b) Unsafe injection practices and needle stick injury risk to staff due to overloads in injection rooms.

**Paracetamol Injections should not be given for 'patient satisfaction', rather, the disadvantages and risks should be explained to them so that its overuse can be brought down. Paracetamol Suppositories are a safe alternative to injections**

- Routine co-prescription of anti-emetics and H-2 blockers is not recommended along with paracetamol.

#### **Follow up/review when?**

1. Not improving in the expected time frame
2. Getting worse in spite of appropriate treatment
3. New symptoms appear-eg., rash, seizures, altered sensorium, jaundice, reduced urine output, etc.

***If there is a worsening on review, immediately decide to treat/ refer up according to the facilities available at your institution***

#### **Supportive care – Non Pharmacological General Management of Fevers**

All patients with a febrile illnesses generally come with some state of dehydration and exhaustion due to lack of food/ fluids, often enforced by care givers at home, or due to ignorance about the vital role of supportive care in any viral fever. Not taking adequate rest in a viral illness often is a cause of significant morbidity, and even mortality. Likewise, any patient with a co-morbidity has to be more closely monitored and cared for, whether in hospital, or at home .

#### **A. Fluids --Oral fluids are the safest**

- ‘Home available fluid’ like kanji water, with some added salt and lime juice is the best in all situations except severe dehydration, and cholera. Small frequent quantities may be given repeatedly .
- This fluid type and rate of intake often reduces the need for anti- emetics
- **IV fluids only for persistent vomiting, severe dehydration, paralytic ileus, shock, cholera, and patient clinically too sick to consciously drink.**

#### **B. Sponging-**

- Use tepid water
- Increase the body surface area being sponged as necessary.
- Cooling the forehead alone with a piece of cloth is not enough

#### **C. Food –**

- No restriction, on the other hand, steady intake of warm, soft well cooked nutritious home available food, is to be specifically advised
- The only advice is-‘Smaller quantity at a time, distributed more frequently’

#### **D. Rest-**

- Rest is one of the most important factors helping recovery
- Advise rest till the patient is symptom free. Children should not be sent to school

**Things not to be done in fever management-**

- Use of covering dresses/ blankets, caps, etc, in children as these can contribute to rapid rise of body temperature, and febrile fits
- Food and fluid restriction
- Going to work/ school, or any exertion

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## Proper communication to the patients, bystanders, public

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1. Fever is a symptom, and not a disease- fear not the fever, but be careful about the cause
2. The commonest fevers are 'viral fevers' which do not require multiple medications or various tests.,
3. Most viral fevers take 3-5 days to recover.
4. Even paracetamol, the simplest remedy for fevers should preferably be taken according to the doctors advice.
5. Supportive care, whether in hospital, or at home, will help you to improve much faster, and feel much less fatigue after the fever comes down. Supportive care includes
  - a. steady intake of warm oral fluids eg thick kanji water with salt , lime juice, tender coconut water, in preference to black tea, black coffee, jeera water, etc
  - b. continuous intake of small frequent portions of warm, well cooked soft ,nutritious food, and locally available fruits.
  - c. Rest till totally symptom free, as it will help you to recover faster, and also prevent spread of the fever to others.
6. Do not compel the doctors to give you injections/ iv drips for fever treatment, as these are not always essential. They can also cause unwanted side effects like shivering, pain, dizziness, or dangerous reactions
7. Injections do not work faster or better than oral paracetamol
8. When to report to hospital after starting treatment
  - a. not improving in the expected time
  - b. getting worse in spite of good treatment *and* supportive care
  - c. Onset of unusual symptoms like rash, fits, bleeding from any site, jaundice, reduced quantity of urine, breathing difficulty, and altered behaviour etc.
  - d. Not able to take food.
9. Self medication is a dangerous habit. Over the counter medication is to be avoided.
10. Covering the nose and mouth while coughing or sneezing, and washing your hands often with soap and water, will reduce the spread of many viral fevers, and respiratory infections to others at home.

### Some danger signs in a patient with fever

Rash  
Fits  
Bleeding from any site  
Jaundice  
Reduced quantity of urine  
Breathing difficulty  
Altered behaviour etc.