



FEVER IN CHILDREN: A FRIEND OR A FOE?

Fever is most common complaint in children and is one of the most common cause of concern for parents as well as care givers. Occasional fever can cause lots stress in parents, family and physicians. In middle of the night, nearly 70 to 80% attendance at children's emergencies in restructured hospitals is for fever of varying degree and duration. There are some basic facts and some myths about fever, having a clear understanding between both will determine the response from caregiver!

WHAT ARE THE BASIC FACTS ABOUT FEVER:

Fever is our bodies' natural response to infection. It tries to kill the germ through a chemical process called inflammation and produces heat which is noted as fever.

The heat is measured by a thermometer that gives us a number (celcius). When there is heat in the body we feel uncomfortable just as we may feel after a jog in hot sun. The higher the number, the higher the heat in the body and the more uncomfortable we may feel.

Heat production in the body is neither proportionate to the severity of infection nor duration of infection, neither does it signify life threatening complications nor seriousness of illness. It only gives us a gauge of the heat and rough estimate of discomfort one may feel with that heat. When we give medicines for fever, it basically covers the process of fire but does not stop it. Since fire is covered, heat does not come out, resulting in dropping of body temperature resulting in normal body temperature. But the cover effect lasts only 4-6 hrs, when the cover wears off and the heat will come back as the process of fire is continuous. Typically during any viral infection the process of fire lasts for 3-7 days, hence parents observe the swinging fever that comes back every 6-8 hrs.

Sometimes the body produces heat by inducing some muscle movements such as shivering and may release heat during cooling down phase which is seen as sweating. Each individual's body response to infection can vary from time to time and infection to infection.

Fever measurement: various types of instruments are available in market to measure the temprture most accurately and it depends on the sensitivity of instrument as well as right techique. Eg ear thermometer may not read correctly if ther is ear discharge or wax, mouth thermometer may over read the temp if some hot food or drink is taken 15-20 min earlier.

Dr Pradeep Raut Prakash
MBBS, MMed (Paed, S'pore), MRCPCH (Paed, UK)
Consultant Paediatrician and Neonatologist

Dr Pradeep Raut Prakash is skilled in Paediatric and Neonatal procedures as Neonatal resuscitation, intubations (nasal & oral), Umbilical catheterisation, chest drains, vascular puncture and cannulation (venous and arterial), peripheral long lines, spinal taps, Exchange transfusion (Central & Peripheral), Total parental nutrition, Surfactant therapy, abdominal tapping etc.

COMMON MYTHS ABOUT FEVER:

1. High fever causes brain damage - fever by it self do not cause brain damage, it's the brain infection that causes brain damage and death.

2. High fever means serious infection or life threatening complications - Not true! Degree of fever is independent of severity of infection and does not suggest any complication by itself unless it is associated with other signs and symptoms.

3. High fever needs urgent attention to bring down the temperature - Needs attention to reduce the discomfort from heat, body temperature drops gradually. When a fever medicine is given, children starts feeling comfortable first (usually in half an hr) and the thermometer number starts dropping 1-2hrs later.

4. Fever causes fits- Fever fits is a tendency of body that depends on genetic makeup hence family history of fever fits will make increase the chances. Fever fits usually happen in very early part of fever(rising body temperature is a trigger). Most of the times parents notice the fits first followed by fever. Tightly controlling fever below certain degree does not prevent the fits.

5. Fever fits worsens the brain damage - Common fever fits (typical febrile seizures) are known to have good neurological outcome. Majority of them resolve by 6 years of age without any treatment. Recurrent fits needs treatemnt manily to minimize the discomfort to child and family.

WHEN TO SEEK MEDICAL ATTENTION?

1. Child < 3months, if temperature >37.5 twice or one recording >38.0 Celcius

2. Persistant vomiting & diarrhoea, younger the baby earlier to seek medical attention,

3. Poor intake with signs of dehydration (peeing less than usual, not having tears when crying, less alert and less active than usual)

4. Localization or specific complaint (like a sore throat or earache, joint pain, tummy ache, neckpain)

5. Persistant fever after 24-48 hours (< 2 years) or 3-4days (>2 years or older)

6. Rash on body or redness of eye, mouth, ulcers in mouth

7. Breathing difficulty such as extra effort in breathing, panting rapid breathing, unusual sound during breathing like stridor .

8. Child is too drowsy, too tired, hard to wake up, unually sleepy

9. Looks sicker than previously.

10. Too irritable, unually cranky, unable to comfort by usual measures and despite good temperatue control.