



FEVER – A SYMPTOM OR AN ILLNESS

Dr. Pankil Dhruv, B.H.M.S., C.C.A.H

One of the biggest misconceptions in health care today is the role of fevers. An inadequate understanding of the cause and pathology of fever often causes a fear in the minds of common man. Fever is one of the most extraordinary and intricate healing processes in the body. It plays out like a symphony, orchestrated only when needed to stimulate an immune response, destroying invading organisms and promoting the restoration of health. The primary goal of treatment should be to cure and improve comfort, rather than lowering body temperature alone. It is important to understand, that the fever itself is not a disease, but rather a symptom of an underlying disharmony.

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Importance of Thermoregulation:

The body temperature of a healthy human being is about 37° Celsius (C) or 98.6° Farhenit (F). If the temperature rises higher, the proteins in our body begin to deteriorate, thus affecting the function of the enzymes (chemical secretions) secreted by the body, creating a havoc. Further elevation in the temperature causes a destruction of the protein structure. Decrease in the body temperature on the other hand inhibits the activity of the enzymes, and the contractility of the heart muscles also suffers. Thus for regular continuation of the body functions, the internal temperature must be within a normal range.

Fever:

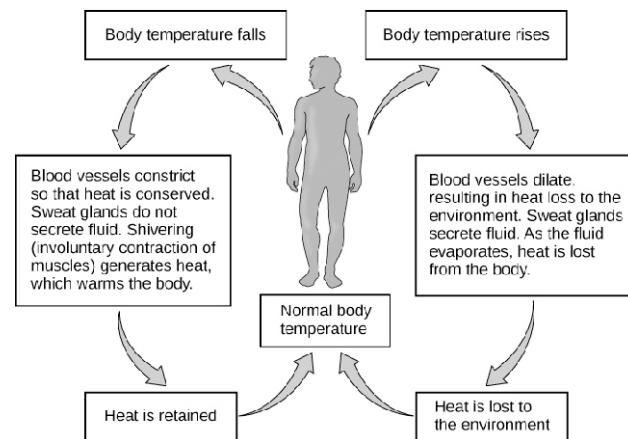
Fever is defined by an oral temperature exceeding 100.4° F. It is a disorder of thermoregulation that causes the body temperature to rise, due to an elevation of the hypothalamic set point (a point set by the brain which acts as a base line to control the temperature of the body).

Pathophysiology:

When an invader (virus, bacteria etc.) enters the body, signals are sent to the brain to increase the

hypothalamic "set point". This essentially turns up the thermostat for a few days to kill the intruder. Signals can come from bacterial toxins or as a result of the body's response to the intruder in the form of release of antibodies and chemical mediators.

Increase in the temperature also enhances the immune system by catalyzing enzymes, increasing neutrophil production and T-lymphocyte proliferation (neutrophil and T-lymphocyte are the different types of white blood cells which play an important role in the defense mechanism). Inflammation is stimulated to protect the area, prevent the spread of infection and initiate the healing process.



Picture Credit: www.wikipedia.com

Variations in body temperature:

Daily variation 0.5° C / 0.9° F

Rectal temperature is 0.40° C / 0.70° F higher than oral due to mouth breathing.

Physiological causes of high body temperature

Exercise

Menstrual cycle (at the time of ovulation)

High environmental temperature

Postmenopausal

Causes of fever:

Commonly include:

- Inflammations
- Dehydration
- Vaccinations
- Infections
- Medications
- Tumors
- Juvenile rheumatoid arthritis
- Teething
- Fever of unknown origin

Symptoms during fever

An episode of fever can make a person feel very uncomfortable. Signs and symptoms of fever include:

- Temperature greater than 100.4° F (38° C) in adults and children
- Shivering and chills
- Pain in the muscles and joints
- Headache
- Intermittent sweats
- Rapid heart rate or palpitations
- Skin flushing
- Feeling faint, dizzy, or lightheaded
- Weakness
- With very high temperature ($> 104^{\circ}$ F/ 40° C) convulsions, hallucination or confusion are possible to occur
- Blisters at the angle of mouth
- Sweating
- Loss of weight

Effects of fever:

- Fever accelerates the metabolism and leads to weight loss
- Increase in the heart rate
- Increased sweating which may lead to fluid and electrolyte loss
- Convulsion, delirium or shock may occur in severe cases

Diagnosis of fever:

Along with having the generalized symptoms of a fever, checking the temperature with a thermometer can confirm the diagnosis of a fever. A temperature greater than 100.4° F in adults or children is considered a fever.

Digital thermometers can be used to measure rectal, oral, or axillary (under the armpit) temperatures.

Management of Fever:

If the fever is mild and there are no other problems or major symptoms, no treatment is needed. Drink fluids and rest.

In children, the illness is probably not serious if the child is playful, is eating and drinking well, is passing good amounts of urine, is alert and smiling and has a normal skin color. One needs to take measures or consult the doctor to lower a fever if the child is uncomfortable, vomiting, dehydrated, or not sleeping well. Remember, the goal is to lower and not eliminate the fever.

Remember - When trying to lower a fever:

Do NOT bundle up someone who has chills.

Remove excess clothing or blankets. The room should be comfortable, not too hot or cool. Try one layer of lightweight clothing, and one lightweight blanket for sleeping. If the room is hot or stuffy, a fan may help.

A lukewarm bath or sponge bath may help cool someone with a fever. This is especially effective after medication is given, otherwise the temperature might bounce right back up.

Do NOT use cold baths, ice, or alcohol rubs. These cool the skin, but often make the situation worse by causing shivering, which raises the core body temperature. Immediate immersion of the patient in a tub of cold water is lifesaving in patients with temperatures above 108° F (42.2° C)

Everyone, especially children must consume plenty of fluids. Water, popsicles, soup, and gelatin are all good choices.

Although eating foods with a fever is fine, do not force foods. Adequate caloric intake must be given during afebrile (not feverish) intervals to prevent weakness.

Situations when medical advice should be sought:

Presence of symptoms that suggest an illness which may need to be treated, such as a sore throat, earache or cough.

Fever lasting for a week or more, even if it is not very high.

History of recent immunization.

Appearance of new rash or bruises.

Infants less than six months with a body temperature of more than 101.5° F.

Confusion, deep sleep or inability to walk with fever.

Difficulty in breathing with a clear nose.

Blueness of lips, tongue or nails.

Continuous and severe headache with fever.

Extreme irritability, lethargy and mental confusion along with stiffness of neck and seizures.

Homoeopathy and Fevers

Fever is the body's natural way of fighting infection. It is often the first symptom of a cold, flu, sore

throat, earache, a childhood illness or even an episode of teething. Each individual person has their own pattern of falling ill and will experience different symptoms of fever. One may feel hot with a high fever and may kick off the covers; another person may be irritable or intolerant of any disturbance and may need to be kept warm; yet another person may sweat profusely, feel thirsty and may feel drowsy. Each of them will need a different homeopathic remedy to help them depending on their emotional state and their physical symptoms. Homoeopathy being a holistic form of treatment considers the person as a whole. The medicines help correct the underlying imbalance that triggered the problem and helps stimulate the body's natural ability to self-heal.

Hence fever is a blessing in disguise; it is a friend not a foe. Try to find the cause of fever and treat it appropriately.

For the Laughs:

The teacher asked her class what each wanted to become when they grew up. A chorus of responses came from all over the room.

"A football player."

"A doctor."

"An astronaut."

"The president."

"A fireman."

"A teacher."

"A race car driver."

Everyone that is, except Little Johnny. The teacher noticed he was sitting there quiet and still.

So she said to him, "Johnny, what do you want to be when you grow up?"

"Possible" Little Johnny replied.

"Possible?" asked the teacher.

"Yes," Little Johnny said. "My mom is always telling me I'm impossible. So when I get to be big, I want to be possible."