

Review Article

Approach to Fever and Its Homoeopathic Management

Amol Chandrashekhar Pandharkar and Govind Thote

Guru Mishri Homoeopathic Medical College PG Institute, Shelagaon Jalna

ABSTRACT

Body temperature is controlled by hypothalamus. Neurons in both the preoptic anterior hypothalamus and posterior hypothalamus receive two kinds of signals i.e one from peripheral nerves that reflect warmth/cold receptors and the other from the temp. of the blood bathing the region. These two types of signals are integrated by the thermoregulatory center of the hypothalamus to maintain normal temperature. In a neutral environment, the metabolic rate of humans consistently produces more heat than is necessary to maintain core body temperature at 37°C. So the hypothalamus controls temperature by mechanisms of heat loss.

Keywords: Fever, Homoeopathic management, types



QR Code for Mobile Users

Address for Correspondence:

Dr. Amol C. Pandharkar

Guru Mishri Homoeopathic Medical College PG

Institute, Shelagaon Jalna, India

Conflict of Interest: None Declared!

(Received 15nd February 2021; Accepted 27 February 2021; Published 4 March 2021) ISSN: 2347-8136 ©2020 JMPI

INTRODUCTION

A normal body temperature is ordinarily maintained, despite environmental variations, because the hypothalamic thermoregulatory center balances the excess heat production derived from metabolic activity in muscle and the liver with heat dissipation from the skin and lungs. According to recent studies of healthy individuals 18 to 40 years of age, the mean oral temperature is $36.8^{\circ} \pm 0.4^{\circ}\text{C}$ ($98.2^{\circ} \pm 0.7^{\circ}\text{F}$), with low levels at 6

A.M. and higher levels at 4 to 6 P.M. The maximum normal oral temperature is 37.2°C (98.9°F) at 6 A.M. and 37.7°C (99.9°F) at 4 P.M.; these values define the 99th percentile for healthy individuals. The normal daily temperature variation is typically 0.5°C (0.9°F). Rectal temperatures are generally 0.4°C (0.7°F) higher than oral readings. The lower oral readings are probably attributable to mouth breathing, which is a particularly

important factor in patients with respiratory infections and rapid breathing. Lower esophageal temperatures closely reflect core temperature.

Fever-normal physiology

The individual first notices vasoconstriction in the hands and feet. Shunting of blood away from the periphery to the internal organs essentially decreases heat loss from the skin, and person feels cold. For most fevers, body temperature increases by 1 to 2°C . Shivering, which increases heat production from the muscles, may begin at this time; however, shivering is not required if heat conservation mechanisms raise blood temperature sufficiently. Heat production from the liver also increases. In humans, behavioral instincts (for e.g., putting on more clothing or bedding) lead to a reduction of exposed surfaces, which helps to raise body temperature.

The processes of heat conservation (vasoconstriction) and heat production (shivering and increased metabolic activity) continue until the temperature of the blood bathing hypothalamic neurons matches the new thermostat setting. Once that point is reached, the hypothalamus maintains the temperature at the febrile level by the same mechanisms of heat balance that are operative in the afebrile state. When the hypothalamic set point is again reset downward the processes of heat loss through vasodilation and sweating are initiated. Behavioral changes triggered at this time include the removal of insulating clothing or bedding. Loss of heat by sweating and vasodilation continues until blood temperature at the hypothalamic level matches the lower setting.

fever and hyperthermia differs by hyperthermia can be rapidly fatal. However, there is no rapid way to make this distinction. Hyperthermia is often diagnosed on the basis of the events immediately preceding elevation of core temperature e.g., heat exposure or treatment with drugs that interfere with thermoregulation. However, in addition to the clinical history of the patient, the physical aspects of some forms of hyperthermia may alert the clinician. For example, in patients with heat stroke syndromes and in those taking drugs that block sweating, the skin is hot but dry.

Pyrogens

The term pyrogen is used to describe any substance that causes fever. Exogenous pyrogens are derived from outside the patient; most are microbial products, microbial toxins, or whole microorganisms. The classic example of an exogenous pyrogen is lipopolysaccharide endotoxin produced by all gram-negative bacteria. Endotoxins are potent not only as pyrogens but also as inducers of various pathologic changes in gram-negative infections. Another group of potent bacterial pyrogens is produced by gram-positive organisms and includes the enterotoxins of *Staphylococcus aureus* and the group A and B streptococcal toxins, also called superantigens. One staphylococcal toxin of clinical importance is the toxic shock syndrome toxin associated

with isolates of *S. aureus* from patients with toxic shock syndrome. Endotoxin is highly pyrogenic molecule in humans:

Causes

1. Malaria
 2. Sepsis
 3. Abscess
 4. Brucellosis
 5. Lymphoma
- Night sweats- Characteristic of TB but sweating from any cause is usually worse at night.

Recurrent fever - Cholecystitis, cholangitis, and UTI with obstruction or calculi.

Headache - Fever due to any cause can produce headache. If severe and with photophobia suspect-Meningitis.

Delirium - Common in elderly and young ones.

Muscle pain- Myalgia classical of viral fever, influenza, malaria, leptospirosis, and brucellosis

Evaluation of febrile patient

Although fever is normal response prolonged episodes can cause damage so always evaluate for stability of patient.

Fever pattern

It is important to note that cycle of fever pattern is often not very helpful in determining the cause of the disease.

Relation to pulse

Liebermeisters Rule- for everyone degree rise of temp above normal, the pulse will increase by 8-10 beats per minute.

Fagets Sign-

The exception to Liebermeisters Rule, this relative bradycardia may be useful when present, although it is associated with substantial differential diagnosis, including typhoid fever, rickettsial, diseases, yellow fever, psittacosis, drug fever, brucellosis, mycoplasma infections.

Types of fever

1. Continuous-Does not fluctuate more than 1 degree Celcius in 24 hr. e.g. Lobar pneumonia, typhoid fever, UTI
2. Intermittent - Temperature elevation for a certain period when returning back to normal e.g. malaria, pyaemia, septicemia
3. Quotidian - Periodicity of 24 hr in plasmodium falciparum malaria

Tertian fever- 48hr. periodicity-plasm.vivax and ovale
 Quartan fever - 72 hr.periodicity plasm.malaria
 Remittent fever - Temperature remains above normal throughout the day with fluctuations more than 1 degree celcius in 24 hr. e.g. infective endocarditis

Common associated symptoms

1. Fever only
 Malaria
 Typhoid fever
 Dengue
 leptospirosis
 Rickettsia
 Relapsing fever
 HIV
 Neurologic symptoms
 Fever,convulsions
 cerebral malaria
 meningitis
 Rabies
 Toxoplasmosis
 HIV dementia
 Abdominal symptoms-
 Typhoid
 Amoebic liver abscess
 Abdominal TB
 Appendicitis
 pyelonephritis
 Fever and rash
 Chickenpox
 Measles
 Dengue
 Other viruses
 Haemorrhagic symptoms
 Hematemesis
 melena
 epistaxis
 petechie
 purpura
 ebola,relapsing fever,yellow fever
 Bone and joint
 Sickle cell disease
 Septic arthritis
 Osteomyelitis
 pyomyositis
 rheumatic fever
 chickungunya
 Gynaecological symptoms
 PID
 Tubo-ovarian abscess

Postpartum endometritis
 Septic abortion
 Genitourinary-
 UTI
 Pelvic inflammatory diseases
 STD
 Abdominal symptoms
 Gastroenteritis
 intra abdominal sepsis
 inflammatory bowel diseases
 malignancy
 Differential diagnosis
 1. Infection
 TB,prostatitis,endocarditis,abscess,line infection,sinusitis,meningitis,arthritis,osteomyelitis,wound infections,diarrhea
 2. Inflammatory
 Rheumatic disorders,vasculitis
 3. Thrombotic
 DVT, PE, MI
 4. neurologic
 Hypothalamic disorders, spinal cord injuries,ICH
 5. Endocrine
 Thyrotoxicosis, adrenal insufficiency, subacute thyroiditis
 6. Git
 IBD, Pancreatitis, cholecystitis
 Fever workup
 CBC with differential and microview
 Blood smear-for malarial parasites
 CXR PA and lateral
 Urine analysis (with microscopy) and urine culture
 2 sets of blood cultures and cultures from any central catheter
 Electrolytes and metabolic panel, LFT, hepatitis panel, HIV test
 Other specific procedures/ labs to obtain data
 Autoimmune workup(RF,ANA, as a history guide, ESR, CRP specific viral serologies lumbar puncture, thoracentesis, arthrocentesis, paracentesis
 CT Scan head
 CT/PE Protocol/dopplers of extrimities
 ECG
 Stool cultures-gram stain,clostridium difficle
 Sputum cultures
 Skin biopsy
 ESR PROTOCOL
 Elevated in
 Acute or chronic inflammation

infection
tissue injury
thyroid disease
azotemia

Homoeopathic management to fever

Aconitum Napellus

Fever: Skin dry, hot; face red, or pale and red alternately; intense nervous restlessness, tossing about in agony; becomes intolerable towards evening and on going to sleep.

Complaints caused by exposure to dry cold air, dry north or west winds, or exposure to draughts of cold air while in a perspiration; bad effects of checked perspiration.

Great fear and anxiety of mind, with great nervous excitability; Restless, anxious, does everything in great haste; must change position often; everything startles him.

Tongue coated white.

Intense thirst. Thirst for cold water. Bitter taste of everything except water.

Aggravation

Evening and night, pains are insupportable; in a warm room; when rising from bed; lying on affected side.

Amelioration In the open air

Aconite should never be given simply to control the fever, never alternated with other drugs for that purpose. If it be a case requiring Aconite no other drug is needed.

Antimonium tartaricum

Clinically, its therapeutic application has been confined largely to the treatment fever with respiratory diseases, Rattling of mucus with little expectoration has been a guiding symptom.

Tongue coated, pasty, thick, white, with reddened papillae and red edges; red in streaks; very red, dry in the middle;

Thirst for cold water, little and often, and desire for apples, fruits, and acids.

There is much Drowsiness, debility and sweat characteristic of the drug.

Great sleepiness or irresistible inclination to sleep, with nearly all complaints.

Aggravation; in evening; from lying down at night; from warmth; in damp cold weather; from all sour things and milk.

Amelioration; from sitting erect; from eructation and expectoration.

Apis mellifica

Fever; Afternoon chill, with thirst; worse on

motion and heat. External heat, with smothering feeling. Sweat slight, with sleepiness. Perspiration breaks out and dries up frequently.

Sleeps after the fever paroxysm. After perspiration, nettle rash, also with shuddering.

Tongue fiery red, swollen, sore, and raw, with vesicles.

Aggravation; heat in any form; touch; pressure; late in afternoon; after sleeping; in closed and heated rooms. Right side.

Amelioration; In open air, uncovering, and cold bathing.

Arnica montana

For the fever resulting from mechanical injuries;

Sore, lame, bruised feeling all through the body as if beaten; traumatic affections of muscles.

Mechanical injuries, especially with stupor from concussion;

Everything on which he lies seems too hard; complains constantly of it and keeps moving from place to place in search of a soft spot.

Heat of upper part of body; coldness of lower. The face or head and face alone is hot, the body cool.

In typhoid; Unconsciousness; when spoken to answers correctly, but unconsciousness and delirium at once return.

Aggravation; least touch; motion; rest; wine; damp cold. Amelioration; lying down, or with head low.

Arsenic album

Fever: High temperature. Periodicity marked with adynamia. Septic fevers. Intermittent. paroxysms incomplete, with marked exhaustion. Cold sweats. Typhoid, not too early; often after Rhus. Complete exhaustion. Delirium; worse after midnight. Great restlessness. Great heat about 3 a.m.

Great Prostration, with rapid sinking of the vital forces;

The greater the suffering the greater the anguish, restlessness and fear of death. Mentally restless, but physically too weak to move; cannot rest in any place; changing places continually; wants to be moved from one bed to another, and lies now here, now there.

Great thirst; drinks much, but little at a time.

Aggravation; After midnight [1 to 2 A. M. or P. M.]; from cold, cold drinks or food; when lying on affected side or with the head low.

Amelioration ; from heat; from head elevated; warm drinks.

Baptisia tinctora

Baptisia has gained its greatest reputation as a remedy in typhoid fever, to the symptoms of which its pathogenesis strikingly corresponds.

Fever; Chill, with rheumatic pains and soreness all over body. Heat all over, with occasional chills. Chill about 11 a.m. Adynamic fevers. Typhus fever. Shipboard fever.

All exhalations and discharges foetid, especially in typhoid or other acute diseases; breath, stool, urine, perspiration, ulcers, etc.

Stupor; falls asleep while being spoken to or in the midst of his answer.

Tongue: at first coated white with red papillae; dry and yellow- brown in centre; later dry, cracked, ulcerated.

Face flushed, dusky, dark-red, with a stupid, besotted drunken expression.

In whatever position the patient lies, the parts rested upon feel sore and bruised.

Aggravation; humid heat; fog; indoors.

Belladonna

Fever: A high feverish state with comparative absence of

toxaemia. Burning, pungent, steaming, heat. Feet icy cold. Superficial blood-vessels, distended. Perspiration dry only on head.

No thirst with fever.

Belladonna always is associated with hot, red skin, flushed face, glaring eyes, throbbing carotids, excited mental state, hyperaesthesia of all senses, delirium, restless sleep, convulsive movements, dryness of mouth and throat with aversion to water.

Worse; touch, jar, noise, draught, after noon, lying down.

Better; semi-erect.

Bryonia alba

Fever; Pulse full, hard, tense, and quick. Chill with external coldness, dry cough, stitches. Internal heat. Sour sweat after slight exertion. Easy, profuse perspiration. Rheumatic and typhoid marked by gastro-hepatic complications.

Complaints: when warm weather sets in, after cold days; from cold drinks or ice in hot weather; after taking cold or getting hot in summer; from chilling when overheated;

Lips parched, dry, cracked. dryness of mouth, tongue, and throat, with excessive thirst. Tongue coated yellowish, dark brown; heavily white in gastric derangement. Bitter taste.

Aggravation; warmth, any motion, morning, eating, hot weather, exertion, touch. Cannot sit up; gets faint and sick.

Amelioration ; lying on painful side, pressure, rest, cold things.

Chininum sulphuricum

Fever; Chill daily at 3 p.m. Painful swelling of various veins during a chill. Shivering even in a warm room.

Periodicity is extremely well marked, the attacks returning at the same hour each day.

Great sensitiveness of the dorsal vertebrae

Cinchona officinalis

Fever; Intermittent fever; paroxysm anticipates from two to three hours each attack; returns every seven or fourteen days; never at night; sweats profusely all over on being covered, or during sleep. All stages well marked. Chill generally in forenoon, commencing in breast; thirst before chill, and little and often. Debilitating night-sweats. Free perspiration caused by every little exertion, especially on single parts.

One hand icy cold, the other warm

Pains are < by slightest touch, but > by hard pressure.

Aggravation; Slightest touch. Draught of air; every other day; loss of vital fluids; at night; After eating; bending over.

Amelioration ; bending double; hard pressure; open air; warmth.

Ferrum phosphoricum

In the early stages of febrile conditions, it stands midway between sthenic activity of Aconite and Bell, and the asthenic sluggishness and torpidity of GELS.

The remedy for first stage of all febrile disturbances and inflammations before exudation sets in ; especially for catarrhal affections of the respiratory tract.

Causation; Checked perspiration on a warm summer's day. Mechanical injuries.

Aggravation; at night and 4 to 6 a.m.; touch,

jar, motion, right side.

Amelioration ; cold applications.

Gelsemium

Fever; Wants to be held, because he shakes so. Pulse slow, full, soft, compressible. Chilliness up and down back. Heat and sweat stages, long and exhausting. Dumb-ague, with much muscular soreness, great prostration, and violent headache.

Chill, without thirst, along spine; wave-like, extending upward from sacrum to occiput.

Bad effects from fright, fear, exciting news and sudden emotions.

Complete relaxation and prostration of whole muscular system, with entire motor paralysis.

Aggravation; damp weather, fog, before a thunderstorm, emotion, or excitement, Bad news, tobacco-smoking, when thinking of his ailments; at 10 a.m.

Amelioration ; bending forward, by profuse urination, open air, continued motion, stimulants.

Hepar sulphuris

Fever; Chilly in open air or from slightest draught. Dry heat at night. Profuse sweat; sour, sticky, offensive.

In diseases where suppuration seems inevitable, Hepar may open the abscess and hasten the cure.

Oversensitive, physically and mentally;

Extremely sensitive to cold air, imagines he can feel the air if a door is opened in the next room; must be wrapped up to the face even in hot weather; takes cold from slightest exposure to fresh air.

Aggravation; Lying on painful side; cold air; uncovering; eating or drinking cold things; touching affected parts; abuse of mercury.

Amelioration; in damp weather, from wrapping

Iodum

Fever; Shivering, even in a warm room. Flushes of heat all over body. Marked fever, restlessness, red cheeks, apathetic. Profuse sweat.

Right-sided pneumonia with high temperature. Pneumonia. Hepatization spreads rapidly with persistent high temperature; absence of pain in spite of great involvement, worse warmth; craves cool air.

Iod. individual is exceedingly thin, dark complexioned, with enlarged lymphatic

glands, has voracious appetite but gets thin.

Hungry with much thirst. Better after eating. Aggravation; when quiet, in warm room, right side. Amelioration; walking about, in open air.

Ipecacuanha

Intermittent fever: in beginning of irregular cases; with nausea, or from gastric disturbance; after abuse of, or suppression from quinine. Intermittent dyspepsia, every other day at same hour; fever, with persistent nausea.

Oversensitive to heat and cold.

Adapted to cases where the gastric symptoms predominate. Tongue clean or slightly coated.

In all diseases with constant and continual nausea. Nausea; with profuse saliva; vomiting of white, glairy mucus in large quantities, without relief; sleepy afterwards; Aggravation; periodically; from veal, moist warm wind, lying down.

Lachesis

Fever; Chilly in back; feet icy cold; hot flushes and hot perspiration. Paroxysm returns after acids. Intermittent fever every spring. Internal sensation of heat, with cold feet.

Typhoid, typhus; stupor or muttering delirium, sunken countenance, falling of lower jaw; tongue dry, black, trembles, is protruded with difficulty or catches on the teeth when protruding; conjunctiva yellow or orange color; perspiration cold, stains yellow, bloody.

Better adapted to thin and emaciated than to fleshy persons; to those who have been changed, both mentally and physically, by their illness.

Left side principally affected; diseases begin on the left and go to the right side.

Intolerance of tight bands about neck or waist. Wants to be fanned, but slowly and at a distance.

Aggravation; after sleep. Sleeps into aggravation; ailments that come on during sleep; left side, in the spring, warm bath, pressure or constriction, hot drinks. Closing eyes.

Amelioration; appearance of discharges, warm applications.

Lycopodium

Fever; Chill between 3 and 4 p.m., followed by sweat. Icy coldness. Feels as if lying on ice. One chill is followed by another. Neglected pneumonia, with great dyspnoea, flying of alae nasae and presence of mucous rales.

Chilliness in the afternoon from 4 to 8, with sensation as of numbness in hands and feet.

For persons intellectually keen, but physically weak; upper part of body emaciated, lower part semi-dropsical; predisposed to lung and hepatic affections.

Ailments from fright, anger, mortification, or vexation with reserved displeasure.

Intolerant of cold drinks; Craves everything warm.

Aggravation; right side, from right to left, from above downward,

4 to 8 p.m.; from heat or warm room, hot air, bed. Warm applications, except throat and stomach which are better from warm drinks.

Amelioration; By motion, after midnight, from warm food and drink, on getting cold, from being uncovered.

Mercurius

Fever; Generally gastric or bilious, with profuse nightly perspiration; debility, slow and lingering. Heat and shuddering alternately. Yellow perspiration. Profuse perspiration without relief. creeping chilliness; worse in the evening and into night. Alternate flashes of heat in single parts.

Great weakness and trembling from least exertion. Breath and body smell foul.

Tongue: large, flabby, shows imprint of teeth, mapped tongue.

Intense thirst although the tongue looks moist and the saliva is profuse.

Aggravation; at night, wet, damp weather, lying on right side, perspiring; warm room and warm bed.

Natrum muriaticum

Fever; Chill between 9 and 11 a.m. Heat; violent thirst, increases with fever. Fever-blisters. Coldness of the body, and continued chilliness very marked. Hydraemia in chronic malarial states with weakness, constipation, loss of appetite, etc. Sweats on every exertion. old chronic, badly treated cases, especially after suppression by

quinine; headache, with unconsciousness during chill and heat; sweat >. pains.

Tongue: mapped, with red insular patches; like ringworm on sides.

Craving for salt; great aversion to bread.

Great emaciation; losing flesh while living well. Great liability to take cold.

Aggravation; noise, music, warm room, lying down; about 10 a.m., at seashore, mental exertion, consolation, Heat, talking.

Amelioration; open air, cold bathing, going without regular meals, lying on right side; pressure against back, tight clothing

REFERENCES

1. Jacobs J. Homeopathic prevention and management of epidemic diseases. Homeopathy. 2018 Aug;107(03):157-60.
2. Teixeira MZ. Homeopathy: a preventive approach to medicine?. International Journal of High Dilution Research-ISSN 1982-6206. 2009 Nov 30;8(29):155-72.
3. Holcombe WH. Yellow Fever and Its Homoeopathic Treatment. W. Radde; 1856.