

Abnormal increase in fever is due to disturbance of the balance between heat-production and heat-expenditure; too much is supplied, through over oxidation of tissues, and too little is discharged, through diminished circulation in the skin. This disturbance occurs when the nerve-centres have partially lost their control or tension power, whether through disease, injury, or the presence of obnoxious matter, liquid or solid, in the blood. When the nerve-centres lose their control *entirely*, hyperpyrexia ensues, a condition which cannot continue without fatal results, except when transitory and due to paroxysms of malarial fever, or ague. Four-fifths of heat expenditure in man is by way of the skin, one-fifth by the lungs.

The usual symptoms of simple fever, as headache, chills, dry skin, rapid pulse, scanty urine, etc., are caused by the rising temperature, while the various symptoms characteristic of each special fever, are due to either the specific poison or to local inflammation. Continued high temperature soon interferes with the bodily functions, and when associated with the presence of infective material, produces fatty degenerations of various tissues, especially in the heart, liver, kidneys, bloodvessels and voluntary muscles. When the temperature is as high or higher each morning than the preceding evening, the outlook is certainly grave; when it falls every morning it is favorable; yet the severity of a disease may not be always measurable by the degree of bodily heat alone, though it is a safe guide to the amount of accompanying fever. When fever heat is high but the pulse rate proportionately much higher, it indicates failure at the heart.

RANGES OF TEMPERATURE IN DISEASE.

Low temperatures are much less frequent than high, and less fatal; at least two-thirds of mankind die of acute fevers. Low temperatures are registered in cholera, apoplexy, alcoholism, emphysema, asthenia, uremia, urinary extravasation, asphyxia, concussion, hemorrhage, paralysis, opium poisoning; in some states of insanity; in the defervescence of typhus, typhoid and relapsing fevers; in some chronic wasting diseases, as diabetes, and

in "morbus ceruleus" or cyanosis, in which the blood communicates between the auricles, through patency of the foramen ovale, or between the ventricles, through abnormal openings, or other cardiac malformations; in these cases the temperature sometimes stands below 80°.

High temperatures are met with in various diseases, as smallpox, measles, diphtheria; typhoid, typhus, yellow, relapsing, puerperal, hectic and syphilitic fevers; phthisis, tuberculosis, hydrocephalus, peritonitis, catarrhal pneumonia, rabies, tonsillitis, menorrhagia, trichinosis, erysipelas, leucocythemia, retention of urine, suppuration, internal abscess and after vaccination. The *highest* temperatures occur in sunstroke, rheumatic and scarlet fevers, lobar pneumonia, tetanus, injuries to the brain and spinal cord, and during paroxysms of malarial fever and ague. They are apt to range above 103°, and when persistent, always have a fatal ending. — *Medical World.*

REMOVAL OF THE ENTIRE SHAFT OF THE FEMUR, WITH GOOD RECOVERY.

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On July 27, 1889, I was called to see a child two years of age, whom I found restless, with slight elevation of temperature for which I could assign no cause at the time. His temperature increased to 104½° F. by the fifth day, when it was discovered that the child could not move its right leg without evidence of pain, and on close examination a slight amount of swelling extending over the whole length of the thigh was noticeable. There was no history of injury. Salicylate of soda and antifebrin were alternately used to control his fever, and the leg was kept on a cushion slightly flexed and elevated. The swelling, however, kept on steadily increasing, though the fever disappeared about the end of the second week, and the patient was comparatively free from pain as long as he was allowed to remain undisturbed. As the disease manifested no tendency to localize itself at any particular point, I concluded at the end of the third week to bandage the leg. This