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BY

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OF PUEBLO, COLORADO.


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# "MOUNTAIN FEVER."

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A MUCH-VEXED question among practitioners throughout the entire territory influenced in its climate by the Rocky Mountains is that of "Mountain Fever." The affection is believed by many to exist as a distinct type of disease, and is defined by Dunglison as "a form of fever said to be peculiar to the elevated regions of the Rocky Mountains, and seen only at an elevation of 7000 feet and upwards."

Mountain fever is not, I believe, a disease *sui generis*, but is a group of symptoms dependent upon other and distinct pathologic conditions.

Incomplete forms of specific continued fevers, such as typhoid and relapsing fevers, localized inflammations partially developed, acute catarrhal affections of the alimentary or respiratory mucous membranes, and disturbance or exhaustion of the nervous system, will, if diligently sought for, furnish a basis for diagnosis in all cases imputed to it. The so-called mountain fever of Colorado was discovered by the pioneer hunters and miners, and is yet believed by the laity and many physicians to be the result of some occult mountain influence, although it is diagnosticated on the plains at an altitude of 4000 feet and upwards.

So far as known, no believer in mountain fever has been able to assign to it any constant pathologic lesions, although it has been credited with many deaths, and its lesions have been the quest of many autopsies.

It is true, I believe, that a great majority of all so-called cases of mountain fever in adults can be safely classed under the head of simple continued fever, as described by James H. Hutchinson in *Pepper's System of Medicine*, but recognized and treated since the time of Hippocrates. In both diseases the attack may be sudden in onset, with chill and febrile reactions, or may be preceded by days of languor, loss of appetite, headache, muscular pains, and disturbed sleep. In both the fever rises rapidly, and has often reached its height before the patient seeks advice.

Vomiting and constipation are about equally common in each, but in either there may be diarrhea, without nausea. The headache may assume a darting, stabbing character, or the restlessness may merge into delirium; the longer continued the active symptoms the more tedious the defervescence in both diseases.

Many patients suffering from "mountain fever" present symptoms of hepatic derangement, with accompanying gastric disturbance, typical of what is known in some localities as "bilious fever," and readily yielding to mercurials, Rochelle salts, or podophyllin, with rapid subsidence of the threatening fever.

The type due to prolonged and exhaustive physical exertion and the subsequent disturbance of nervous

equilibrium, however, presents less, and often no evidence of hepatic implication, but a higher range of bodily heat, with more active cerebral symptoms, and a cleaner and redder tongue. This type is most common among laborers who are exposed to the sun, and although recent arrivals at any given point of high altitude are more subject to the disease, they do not exhibit symptoms different from those who are already acclimated by many years' residence, except perhaps in point of severity.

The name "mountain fever" is limited by not a few physicians to this type.

It is true that those habituated to a low elevation experience great difficulty in accomplishing at an altitude of 4000 feet and upwards what was previously but an ordinary day's labor for them, and performed with ease at lower altitudes. This extra demand on the physical resources, under climatic conditions including great elevation and, during the fever season, intense mid-day heat followed by a low nocturnal temperature, with the consequent disturbance of the heat-centers, is a very productive cause of a fever which does not, however, present features sufficiently distinctive from those of simple continued fever to justify a separate name.

Identical exciting causes will produce similar groups of symptoms designated in this country as "mountain fever," but in lower altitudes as bilious, simple continued, catarrhal, idiopathic or malarial fever.

It is probably true that modified forms of typhoid fever are, next to simple continued fever, most frequently mistaken for mountain fever. Conse-

quently there are physicians who believe them to be of identical origin, but modified in outward manifestations by climate.

It is a pertinent fact that, in localities where mountain fever is regarded as endemic, simple continued fever, so clearly described and given its place in medical literature, is rarely if ever spoken of, and the presence of malarial influences is strenuously denied.

It is very well known that climate is a potent factor in the etiology and symptomatology of many diseases, among which is typhoid fever, but it is impossible to reconcile with the identity of these diseases the facts that we have typhoid fever with its typical temperature-curves, febrile period, pathologic lesions, and other definite symptoms, while the only constant symptom of its supposed congener is fever, without characteristic features, but having irregular exacerbations and remissions, both as to time of recurrence and degree of severity.

From a list of some fifty patients admitted to the St. Francis Hospital at Colorado Springs during the summer and autumn of 1890, sent there with the diagnosis of "mountain fever," Dr. W. A. Campbell reported the tabulated histories of thirty-two cases at the annual meeting of the Colorado State Medical Society.

In eighteen the rose-colored spots of typhoid developed. In six they were absent, and in eight their presence or absence is not stated.

Post-mortem examinations of the five cases terminating fatally revealed the intestinal lesions of typhoid fever in all.

Campbell's observations, which have been thorough rather than extensive, convinced him that mountain fever may be either typhoid, malarial, intermittent, or remittent.

The onset of mountain fever is described as "abrupt and its duration from four days to eight weeks, terminating either by crisis or lysis." A febrile disease having such a variable fever stadium, argues against its own specificity and suggests the suspicion that it is a symptom dependent upon indefinite pathologic conditions.

Less harm is suffered by adults through the diagnosis of mountain fever than by children, in whom diagnosis is always more difficult and treatment most urgent.

It is far from easy to make a differential diagnosis between pneumonia in an infant and a disease said to be common to children, claiming for its prominent symptoms the sudden and persistent rise in temperature, anorexia, vomiting, accelerated respiration and restlessness, followed by stupor, with an absence of physical signs.

Meningitis, scarlet fever and measles, without eruption or with unnoticed eruption, develop symptoms entirely compatible with mountain fever as it is frequently described.

To rest upon the diagnosis of mountain fever as the disease, when the cause of it is some definite inflammation, the local signs of which are beyond reach of observation, partially developed or transient, conditions common to children, is to multiply sources of error in diagnosis.

Seven years of search for this chameleon of dis-

eases in a locality where tradition held it to be a necessary feature of acclimatization have failed to convince me of the invidiuality of mountain fever; in my opinion it is simply the febrile manifestation of various diseased conditions capable of classification only as belonging to other diseases.

It would be to the credit of diagnostic accuracy if the vague term "mountain fever" were expunged from the nomenclature of Rocky Mountain practitioners. Its perpetuation, conveying the impression that it is a distinct disease, indigenous to the mountain regions, but without specific cause, lesions, characteristic symptoms, duration, mode of attack or retreat, can only serve to confuse diagnosis.