

No. 1003

On symptoms of heat & quick pulse in fever.
(to come in between the lectures on Cullenian theory of fever)

Fordyce

Upon strict scrutiny we do not find that heat is always present when fever is present, nor always absent when fever is absent.

Physicians had no instrument for measuring heat before the time of Van Helmont, who invented the thermometre.
all: that the ancients have said on that symptom of fever must be uncertain.

The sagacious Boerhaave discovered that heat was too vague a symptom of fever to be admitted as pathognomonic. He therefore added to the definition, the increased velocity of the pulse. The common standard of the pulse of a grown person in health is 73 strokes in a minute, that is to say 73 contractions of the left ventricle of the heart. Fever was: said by Boerhaave and his followers always to be present, when in a person whose natural number of pulsations is 73 in a minute, ^{they} become 90, or more in that time. Suppose we admit that all D's in which the number of pulsations are above 90 in a minute to be fevers, let us see what diseases must be included under that name.

There

colic arising from a
There is sometimes a spasmodic contractions of the
Intestines, when the pulse becomes more than 100 in a minute.
If we give this patient a dose of hot spices in wine, the
contraction of the intestines is carried off, and the pulse
returns to its natural state. We cannot say this man
had a fever. If a person uses the exercise of dancing
or playing at ball, his pulse will frequently rise above
100; so will that of a delicate irritable person on
suddenly meeting with an object exciting these affections
& surprise; but assuredly we cannot say such persons
have a fever.

As an increased frequency of the pulse may be
present without fever; so, on the other hand, fever may be
present, with all its essential symptoms, while the pulse
shall be 10, 20, & even 30 below the ordinary standard of
health. Dr. Fordyce repeatedly pointed out such cases
to us in the hospital, where the patient had every other
symptom of fever.

The increased pulsations in a given time is not a pathog-
-nomic symptom of fever, since they may be increased
without a fever being present, and decreased even in the
very worst case of fever.

There may

There may, moreover, be restlessness, anxiety, furred tongue, headach, w^c very often take place in fever, yet there shall be no fever present; and these symptoms shall be absent in a patient afflicted with this disease.

In the Lock-jaw, or tetanus there is a frequency of the pulse, headach, nausea, loss of appetite, want of sleep, and frequently delirium; but these symptoms depend on the spasmodic contraction, or disposition to contraction in different muscles of the body, do not constitute a fever.

A disease w^c affects a part of the body only, as an arm, the head, stomach &c. and does not effect the other parts of the system, cannot be called a fever. Ford.

Description of Fever

Nov. 8. 1803.

Gordyce —

A Fever is a disease w^{ch} affects the whole system. It affects the head, the trunk of the body, the extremities, the circulation, the absorption, & the nervous system. It affects the skin, the muscular fibres, & the membranes. It affects not the body merely but the mind also. Fever is ∴ a d. of the whole system, but it does not affect the various parts of the system uniformly and equally; for sometimes one part is much more affected than another.

D. Gordyce tells us, as the result of his own observation, that at least ten fevers take place between 8 in the morning & 8 in the evening, for one that takes place between 8 in the evening & 8 in the morning. Definition is not able to comprize Fever; it is best known by description. —

A Fever begins with languor, weariness, weakness, & insensibility of the extremities. Sometimes a temporary, or transient blindness, & insensibility in the other organs of sensation, cold & trembling, pain in the back.

Horripilatio

Horripilatio; the skin pale, dry, and of a dusky colour; a dry foul tongue, & thirst; transparent urine; costiveness, and suppression of other secretions; paleness & dryness in ulcers; a small obstructed pulse, sometimes intermitting; pain in the limbs, joints & forehead, and delirium.

anxiety; oppression & swelling about the praecordia; frequency of the pulse; quick & laborious respiration, sometimes with a cough; rigor & horror; thirst, flatulencies, loss of appetite, nausea, & vomiting.

Unless the symptoms of the cold stage destroy the patient, as is sometimes the case, they are followed by

rigor & horror; heat rising about the praecordia, and diffused from thence over the body irregularly, unequally, and with flushing; a strong full obstructed pulse, or a very frequent small one; pain in the head and joints; stupor & delirium; universal soreness; redness arising in different parts irregularly; the urine high coloured, but perfectly transparent; sweating in the head & breast, or over the whole body, with partial secretions. — By this train of symptoms those of the first stage are gradually relieved. at last

2d stage

At last the pulse becomes free; all the secretory organs are relaxed; hence the skin grows soft & moist, and returns to its natural colour, the tongue is likewise soft and moist, the bowels are open & free, & the urine is in greater quantity; if transparent when discharged, after a little time it becomes turbid & opaque, and at last deposits a copious sediment. The secretions are often greatly increased; there arises a copious & universal sweat, or a purging, or a great flow of urine; and this is called the crisis of the fever; - for the frequency of the pulse & all the other symptoms of the first & second stage subsiding, the patient recovers his health, but is considerably weakened. Sometimes there arises an inflammation, which terminates the disease; at other times an hemorrhage occurs in some part of the body & the symptoms of the first stage disappear, or are greatly diminished.

Fever is divided into Intermittent, and Remittent. The Intermittent is when the symptoms of one period go off entirely before a second arises; or there is only left

left a slight pain in the back, a foul tongue, some contraction and paleness on part of the skin, with languor, or some other slight symptoms of the first stage.

The Remittent, is when the patient is greatly relaxed; but the pulse continues frequent, & several other symptoms are not carried off before the second period begins.

In Continued fevers, so called, the exacerbations happen commonly every day in the evening; Continued fevers left to themselves have more violent exacerbations generally on the 4th 5th 7th 9th 11th 13th 14th 17th and 21st days, more yr. on any others. These therefore have been called critical days.

For the most part, if a crisis should not terminate a continued fever, it increases during the first week; arises to its greatest violence in the second, and gradually wears itself out in the third, or sometimes in the fourth.

In continued fevers the danger arises from the violence of the first stage, & the delirium produced by it; or from

from too strong reaction of the vessels; or from great weakness and irritability.

The violent symptoms of the first stage is known by the disease being preceded by long continued languor, and its being attended by great prostration of strength; by a black fur upon the tongue, by petechiae, haemorrhage, putrid secretions & faeces, foetid breath, frothy & thick blackish urine. The skin is now rough, dry & unequal, & ulcers become perfectly dry. The tongue is covered with a dry rough fur; the mouth is dry, & the thirst unextinguishable. The urine is pale, perfectly transparent, and in small quantity. The nails, fingers, & feet remaining cold & pale. The nose sharp, temples & eyes hollow; skin of the forehead contracted; ears cold & face universally pale, or of a dusky colour. (Facies Hippocratica.)

The pulse is at this time frequent, irregular and intermittent; the breathing short, quick & laborious; the praecordia swelled & hard; the anxiety great. When the mind is much affected there is delirium, which begins with watchfulness, restlessness & unrefreshing sleep; the imagination is hurried; the patient picking the hairs

feathers off the bed clothes, & hunting flies. At length the
thirst goes suddenly off; a violent delirium succeeds,
or else a total insensibility, or convulsions & death
soon follows. These are the usual appearances

when the patient is cut off in the first stages. These
very violent symptoms of the 1st stage, seldom occur excepting in the
Plague & malignant yellow fever.

The symptoms of moderate reaction in the
2^d stage is indicated, by a hard full pulse; a
great redness; a quick respiration; a dry white
tongue; great pain in the head & joints. A sweating
is not uncommon about the head & breast, or
all over the body; the eyes are swelled & red;
a stupor & delirium follows & with these, or with
convulsions, the patient expires.

But in the 3^d stage, or when symptoms of great
weakness, irregularity & irritability are present, then
cold, clammy, or colligative sweats appear, or else
a purging. Tears flow in abundance, & so does the urine;
or some other secretion. ^{is marked by} This period a small, quick
and trembling pulse; the patient lying stupid, without
much signs of uneasiness; or on his back with his legs
and arms

and arms extended, or stepping out of the foot of the bed; he faints when in an erect posture, or upon any evacuation from his bowels. A delirium & subsultus tendinum mark this melancholly period; the urine & faeces are voided without knowledge of the patient; soon after the pulse is lost in the arm, & death closes the scene. (see Ford. Vol. 1st)

The degree of danger, w^{ch} is to be anticipated in severe fevers, is principally indicated by 1st an excessive excitement, or 2^d by excessive debility, or failure of the vis vitæ, or nervous power. The 1st or excessive, or inordinate action takes place chiefly in those fevers w^{ch} are called ardent, or inflammatory; and the last, or failure, or depression of the vital powers, is peculiar to fevers of the nervous or typhoid kind.

The symptoms of a defect in the vis vitæ, or energy of the sensorial functions, are common to many fevers among us; and being among the most dangerous they require your particular attention. It is easy to lessen the inordinate action of the arterial system by bleeding; but it is more difficult to raise the depressed vis vitæ. You ought therefore to know correctly the symptoms which in-
-dicate

indicate this dangerous state of your patient. —

— Tremors of the hands, as well as of the tongue, when put out, indicates that your patient is verging to this dangerous state. If he is unable to support himself on either side in bed, but lies constantly on his back, & slides down to the foot of the bed it is an alarming symptom. When the Diaphragm is spasmodically affected, so as to produce hic-cough it is generally a fatal sign, so likewise is a relaxation of the Sphincter muscles of the bladder & rectum, allowing the urine & feces to pass involuntarily, is a sign of extreme debility & is almost always a fatal symptom. But when the muscles of the Oesophagus is so far enfeebled as to render the act of deglutition difficult, together with a short & laborious breathing death is at hand. By knowing, & forwarning these fatal symptoms a physician gains some credit even when he cannot save his patient. —

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