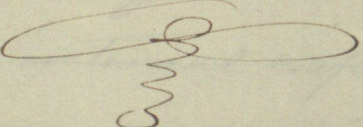


Thesis
on
the causes, symptoms, &c.
of Autumnal Fever,
Presented to the
Medical Faculty,
of the
University of Nashville
Sept 1857 &
By
A. M. Boatwright,
of
Lexington District
So. Ca.


Settled in compliance with
the requisition of this Institution,
I present for your consideration
my views on the causes and symptoms
of Autumnal Fever—

Causes:— The continued relaxing heat
of summer, especially when accompanied
with moisture, stagnant water, when
the sun has full action, but the
winds are excluded by woods, &c—
These causes never fail to prepare
the inhabitants for either remittents
or intermittens; the moist atmosphere
of such places, operating upon the
superficial capillaries, repels the blood
from the surface, whereby the accum-
ulation upon the internal capilla-
ries exceeds a certain proportion, or

is thrown in so rapidly, that the capillaries cannot adapt themselves to the accumulating volume, a re-action takes place in them, by which an effort is made to relieve themselves from embarrassment. This process is strikingly illustrated by exposure to cold.

The first effect is a paleness of the surface, occasioned by a ~~react~~ retrocession of the blood from the capillaries of the skin; in consequence of which, an unusual quantity is suddenly thrown in upon the internal capillaries; these react; the consequence of which is, that not merely the excess of blood is cast back upon the superficial

Capillaries, but also a portion of
 that of the internal, from the
 energy of their re-action, which
 produces a glow upon the surface.
 In Fevers, the injury sustained by
 the superficial capillaries is not
 immediately remedied; and cons-
 equently, the re-action of the ~~ex~~
 internal Capillaries, does not at
 once overcome the atonic state of
 the external, and the re-action is
 perpetuated, and the fever continues.
 The immediate tendency of the
 fluids cast from the external cap-
 illaries, is to the liver and spleen;
 as the blood recedes from the
 surface, it accumulates in these
 viscera, or some other internal organ,

but in our autumnal fevers, principally in these organs, inducing enlargements, chiefly of the latter." In such cases it would appear that there is a constant effort in the spleen, produced partially by its contractile powers, but more by the action of abdominal muscles, diaphragm, and the mechanical influence of the other abdominal viscera, to relieve itself of the excess of blood with which it is charged, by throwing it into the general circulation of the reaction of the Capillaries of the spleen, liver &c. then operate upon the external capillaries, and fever is the result of this struggle between the two capillary systems."

In addition to the causes already mentioned, remittent Fever may be, and frequently is induced by over fatigue; debauch, and all kinds of excesses, and irregularities; sudden changes in the atmosphere, more especially, when the system is predisposed to fever—

The term bilious has been applied, and very improperly, to designate this Fever; almost any other organ is as liable to become the seat of local disease, Gross Fever as the liver—

“Nothing,” says Daniel, “has done so much towards making this term fashionable as the free use of drastic purgatives, in most acute diseases within the last forty years—Almost any person in health may be in a few

days purged into what is commonly
 called a bilious habit, by the free
 use of Calamel, and by Abstinence.
 By active purging, the blood is
 diverted to the abdomen; the liver,
 its largest organ, receives and in-
 creased volume, and its secretion,
 are augmented. So long as the
 secretory function of the liver is
 exercised, the quantity of bile is
 increased by each additional amount
 of blood determined to it, but, in
 many instances, the volume of blood
 cast upon the liver is so great and
 sudden, as wholly to overpower it
 in the exercise of its functions,
 whereby the secretion of ^{which} is suspend-
 ed—

This has been known to occur habitually in concentrated cases of autumnal fever, and in Yellow fever. In these cases, free purging will sometimes, by diverting some of the excess of blood from the liver immediately to other abdominal viscera, relieve the former from a portion of the blood that has overpowered its action, when the biliary secretion is restored; but such a measure without improving the condition of the patient, increases the tendency of the blood internally, and exhausts further his little remaining strength. The existence, then, of increased biliary secretions in our autumnal fevers is rather a consequence, than a cause of the disease and is sometimes

a consequence of the injudicious use
of active purgative medicines—

Symptoms:— "The first-impresion
to the sensations of the subject to
the cause of autumnal fever,—be its
nature and manner of application
whatever 'A my- is perceived in the
skin— The second is a vitiation of
the taste; this sometimes exists for
several day— Afterward follow pains
in the head, loins and deep-seated
bones, nausea, occasional gripings,
sense of lassitude, thirst, &c. The
appetite which before had been
impaired, becomes not unusually,
very keen, just before the supervention
of the disease— This is attributable to
the accumulation of blood in the

Capillaries of the alimentary canal, in consequence of which, there is probably an 'increased secretion of gastric Juice: this increased desire for Food is frequently in a ratio, with the severity of the impending attack, and more constantly precedes severe than mild cases'. Upon the supervention of the chill the surface is 'inelastic and shrunke, the skin on the hands and feet, becomes wrinkled, and palpable pits especially in the extremities, follow the pressure of the fingers upon the skin, which loses its natural appearance, and becomes more or less colored with the venous blood, which would seem to coiter in the capillaries-

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Pains are felt in the deep seated bones, from the undue determination of blood to them, as remarked by Rush - The respiration is oppressed with frequent sighings; from a similar cause a sense of fulness is felt in the abdomen - As the chill advances, nausea is induced, frequently followed by vomiting or retchings, which usher in the hot stage; which may be considered as the result of a reaction in the internal Capillaries, to relieve themselves from the accumulation of blood upon them, sometimes, from want of power in the internal Capillaries, the reaction is not adequate to the restoration

of the circulation and heat to
the surface - and then ^{the} disease, in
many cases, speedily terminated
fatally -

In these cases, upon Autopsic
examinations, great accumulations
of blood internally are ~~observed~~ ^{observed} -

Here then is great restlessness and
complaint of internal heat -

At other times, the external
Capillaries yield more rapidly,
and the paroxysm terminates in
perspiration - " In some instances,

the external Capillaries yield so -
for to the re-action, as to become
the passive conductors of the serous
part of the blood, which then
passes off profusely through the pores

This perspiration is profuse and clammy, and always unfavorable; in almost every case of fever, that terminates unfavorably, there is this character of perspiration present at some stage.

Here the surface is cool, if not cold; and the evaporation of the perspiration subtracts further from the heat of the system already below the healthy standard. Occasionally, there appears to be a fixed resistance in the external capillaries, and a protracted reaction in the internal. In such, the skin is constantly hard, dry, rough, and very usually yellow, occasional petechiae.

The adnata of the eye is yellowish

and watery, with its internal vessels deeply injected with blood - The remissions are imperfect, and frequently in the course of the disease disappear. The stomach is usually but slightly affected with nausea, the bowels are disposed to constipation, the urine is straw colored, in some instances there is an entire suppression, in others a mixture of blood and urine, and occasionally, with very little or no urine, there are frequent discharges of almost pure blood from the bladder - There is occasional slight delirium - The sleep is disturbed - The pulse is quick and frequent, with some degree of

There is frequently great gastric irritability, attended with bilious vomiting, especially upon the introduction of fluids in the stomach. The thirst is excessive - The teeth are covered with a dark border - The tongue is covered with a yellowish or brown coating - The patients flesh gradually wastes away - The pulsation in the abdominal aorta are observed through the covering of the patient, who is now very peevish and irritable - His appetite and thirst becomes pretty constant, and he dies at the termination of from fifteen to thirty days usually comatose, and in a state of extreme

emaciation - Previous to death, there is a great disposition in the skin to the production of sores, upon which thick scabs form.

Treatment: - The indications of cure are to equalize the circulation, and thus relieve the internal organs from the force of the disease - In this consists the whole secret of removing all forms of fevers - In order to effect this great desideratum, we must, first cleanse the stomach and bowels, and restore a healthy action of the same; secondly - Restore all the secretions and excretions, Thirdly, support the strength of the system -