

AN
INAUGURAL DISSERTATION
ON

Typhoid Fever

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Fevers are the most numerous and mortal diseases the physician has to contend with, they in one form or another destroy by far the greater portion of mankind.

The great fatality of fevers has been attributed by some to the active antiphlogistic treatment practiced here before. And one writer even goes so far as to say "that within a hundred years from Sydenham the indiscriminate use of the lancet, and the antiphlogistic regimen, so highly recommended by him, was the cause of more premature deaths, than all the wars that ravaged Europe during that period."

The above assertion we cannot accredit, for from the time of Sydenham to the beginning of the present century, all diseases were characterized more

or less by their great phlogistic tendency, while since that time there has been a gradual change to a typhoid tendency and consequently they do not require the active antiphlogistic treatment as during the days of Sydenham and the century and a half following,

Hippocrates taught that every fever ran its course. This is strictly true of the fever under consideration, but there are some that may be aborted in their incipency.

There has been nothing added to the theory of fevers since the time of Fordyce a Scotchman who graduated in medicine about one hundred years ago. He said fever was an inflammation of the whole system.

Typhoid fever is a non-ruptive

idiopathic fever. It is not found further North than the Southern boundary of Greenland nor further South than Cuba,

It is said to be the characteristic fever of New England; but so far as our observation has extended (which has been in Massachusetts and vicinity) it is certainly the characteristic fever of Middle Europe. Any one who has lived to the age of thirty years and has not been visited by an attack of this formidable disease is the exception rather than the rule. This fever was not known prior to 1833 and was first described by Dr Hale of Boston.

Symptoms - This fever has a longer forming stage than than any other disease. I cannot tell precisely at what time it does begin, it is so gradual.

It comes on insidiously and increases gradually, the patient is incompertible, complains, perhaps of weariness easily fatigued the appetite is gradually impaired; there is soreness of limbs and yawning, there may be slight burning of head, pain in the back, slight elevation of pulse; this may last from ^{one} to four weeks,

There is burning and flushing of the face; during this time the tongue becomes narrower larger and more pointed, resembling the shape of a prism, After this there is a distinct chill, followed by fever; but the fever does not go near so high, nor pulse so frequent as in intermittent fever. Pulse generally from seventy five to a hundred beats in a minute. The temperature is not equally diffused throughout

the system. There is generally cessation of chills for two or six days, followed by perspiration, but the fever does not entirely go off. There is a red flush in one chest, the other cool and pale. The flush in the face is of a more purple tint than in most other cases of fevers; when it is absent there is frequently a dusky hue of the complexion, with a heavy dullness of respiration, slight in some, but very striking in others.

During this time, the tongue continues to become narrower, shorter, coated and red around the edges.

There is pain in the back, head and limbs; patient is delirious and watchful.

These symptoms continue with

little other change than a gradual increase. The fevers become more frequent and weaker; the obtuseness of countenance and duskiness of complexion deeper. The stomach though often retentive is sometimes irritable.

Diarrhoea is frequent, if not purgatives will act powerfully; transient pains are felt in the abdomen, increased by pressure. In drinking water there is a peculiar gurgling sound like passing water into a jug. The urine is often scant and high coloured but sometimes copious. There is dyspnoea in some forms of this disease; cough is intimately associated with it; the sputum is peculiar, it is very white, frothy, scant and tenacious.

There are strong cerebrospinal

manifestations; headache is one of the earliest symptoms, it is not so severe as in intermittent fever but more persistent.

Pain in the head will after a while increase and pain in the head gradually fade out. In the beginning there is mental languor which, as the disease progresses, deepens into delirium wholly different from any other delirium some times low muttering then frantic roaring like a maniac. There is more or less manomania; when this is fully developed manomania the disease is almost certain to prove fatal, the disorder and mind will become right after recovery.

The buzzing and singing in the

ears are changed into hoodrups
of hearing and sometimes deaf-
sp. The eyes are injected and
after the sight obtunded.

There is difficult deglutition
and sometimes purpura

Abdominal symptoms are almost
pathognomic, there is a peculiar
tiroecious, glutinous exudation from
the tongue, teeth and lips; the tongue
and mouth cracked and often bleed-
ing. The bowels are almost always
affected; if diarrhoea does not set in
from the beginning, there is peculiar
susceptibility to cathartics, Occasionally
there is hemorrhage; this occurs about
one case in ten. There is generally
not much abdominal pain, When there
is sudden severe pain attended with
rigor, the bowels are perforated and the

patient is very certain to die.

There is often swelling of the abdomen; in proportion to the tympanitis is the severity of the disease. Not infrequently a gurgling sound is heard by passing an the ilio caecal region.

There is no disease, in which there is so much emaciation as this. The duration is very variable death may take place during the sixth or seventh day, but more generally during the second or third week, sometimes not until the end of six weeks.

The period of convalescence is equally variable. It may begin at the end of the ninth day, though seldom before the end of the third week and often not until the expiration of six weeks; indeed in

have known a patient to recover after
lingering for seventy days without
any marked curvulence.

Anatomical lesions, — There is a
tendency to softening in all the
tissues. Sometimes you can pen-
etrate the heart with the finger.

There is often found a clot in
the right Ventricle of the heart
this has no agency in causing
the patient. There is a diminu-
tion of fibrin in the blood and
it becomes lower as the disease
proceeds. The blood sometimes
aggregates to the lower portion
of the lungs, producing some-
thing like splenization

has never revealed
any lesions of the brain in Ty-
phoid fever. There are certain

anatomical changes which are especially characteristic of this fever. Peyer's glands are elliptical patches of aggregated mucous follicles in the ileum, commencing at the ileo-caecal valve and becoming fewer as you go up. These become inflamed and necrotic and, by obliteration of these glands, the contents of the intestines pass into the peritoneal cavity and speedily destroy the patient.

Sometimes there is only ulceration and perforation of one of these glands destroying the patient. But in every case of Typhoid fever there is more or less ulceration of these glands indeed "the ulceration of these glands" says Dr Woods "is as characteristic of the disease

in question as the peculiar
fistular eruption is of Varicella.

There is a variety of opinions,
as to the cause of the ulceration of
Peyer's glands in Typhoid fever.

The theory of Stokes, of Dublin
has been received with more un-
animity than almost any other.
He says that during an attack
of Typhoid Fever there is a deposi-
tion of a peculiar vitiated matter,
in the follicles of Peyer, called by
him "Massa typhoidea" or "typhoid
matter" which produces inflame-
nation and ulceration.

This fever is not contagious,
but it is believed to be so by many
and there are many facts going to
prove that it is contagious. Our
able proofs of theory and practice

Says "all eruptive fevers are con-
tagious, non-eruptive non-contagious"

Another peculiarity of the fever in
consideration is a person is not liable
to a second attack.

Causes— The etiology of this
disease is very obscure, It is not
caused from heat or cold as
some declare. For the Esquimaux
living in a climate ranging
from 10° to 60° below zero, are equally
healthy and exempt from this fever,
as the perfuming Arabs that roam
upon the arid and parched deserts
of Africa.

The vicissitudes of heat and
cold may & do produce inflammation
of the mucous membrane, causing
a phlogistic fever but not Typhoid
Fever

Eating too much does not produce it, even putrid flesh. It is not produced by Malaria, for in those regions where malarial fevers are endemic, you see but little Typhoid Fever. It more abundant upon high rolling countries with a gravelly subsoil; is more luxuriant in crowded dwellings with no atmospheric circulation under the floor.

The following is Dr Wood's opinion in regard to its etiology, as expressed in his able work on the Practice of Medicine. "The most rational view of the etiology of enteric fever, in the present state of our knowledge, seems to be, that an insidious predisposition exists in many to this disease, analogous, in some measure, to the tuberculous,

gouty and rheumatic predispositions which is liable to be called into action by various exciting causes, perhaps by almost any cause capable of disturbing the vital functions; but that all persons do not have the predisposition, and that it is generally exhausted by one attack of this disease; hence its occurrence after fatigue, exposure to heat and colds, mental anxiety, &c.

Prof Carno informed Prof Bowling, during his visit at the Immigrants Hospital, New York in 1856, that all the Typhoid Fever that occurred the winter previous, were in those wards in the Hospital without ventilation beneath the floors.

It is said that if the matter deposited upon the walls of crowded rooms be injected into the veins of a dog

will produce all phenomena of Typhoid Fever, From these facts, the effects of bad ventilation must be a great source of this fever;

Diagnosis — The characteristic symptoms of this disease, are the slow and insidious mode of attack, the diarrhoea at the beginning, or a peculiar susceptibility to coartics, the attenuated countenance and dusky hue of the complexion, tendency to epistaxis, a peculiar flush of one side of the face and a corresponding pallor of the other, the prologued tongue, its tendency to become narrow and prognathic shape the subulaut rhachis; and after the seven or ninth day the dryness of the tongue, the general diminution of the secretions, tympanitic

abdomen, rose colored eruption,
deafness want of expression delirium &c

All of these symptoms, however,
are not present in every case. Some
times the disease presents no other
symptoms, than those of moderate fe-
ver with the characteristic diarrhoea
or towards it perhaps a few rose colored
spots. Occasionally there are cases in
which diarrhoea is the leading symptom,
Sometimes the pectoral symptoms are
most prominent, Instead of the dry
mucous cough, there is tenacious
bloody expectoration attended with
great pain and dyspnoea. In
other cases the cerebral symptoms
seem to take the lead and there are
delirium and stupor from the very
beginning.

One of the fevers with which

Typhoid Fever is confounded is intermittent or bilious fever, the latter may be distinguished by its more regular and decided remissions, bilious vomitings, yellowness of skin, great suffering of the patient; and an absence of the diarrhoea in the incessant stage, narrow and prismatic shaped tongue, the absence of epistaxis, epistaxis delirium rose colored eruption etc,

The fever in consideration not infrequently begins like a simple intermittent, with regular chills followed by febrile reaction, the diagnosis in this case may be easily made by judiciously administering quinine, and if the paroxysms do not succumb to the great medicinal antidote, may pronounce

it Typhoid Fever. In a genuine Typhoid fever the hair will always fall off.

Prognosis— In this disease, there is no condition so low, nor symptom so fatal, that death should be considered inevitable. On the other hand often in the most flattering cases— the patient apparently in no danger, he suddenly sinks from hemorrhage of the bowels or is carried away by acute peritonitis consequent upon the perforation of the glands of Peyer. The most unfavorable and alarming symptoms are complete delirium, stertorous respiration, profound coma, epileptic spasms, utterly regardless or uncaring of surrounding objects and persons rigidity of limbs

and eye lids, wasting diarrhoea,
hemorrhage, involuntary discharges
from the bowels, colligative sweats, gut
tympoetis, intestinal perforation &
Perforation of the intestines is not nec-
essarily fatal. Where the puls continues
about a hundred there is little hope
Extensive dyspnoea is a very un-
favorable symptom.

In proportion to the tympoetis is
the gravity of the disease, Where there
is epileptic spasms, the case is almost
certain to prove fatal

In hemorrhage of the bowels about
one half die, in retention of urine
about one third die Children
seldom die of this disease, it is al-
so less fatal among negroes. If
a stranger is attacked his chances

are diminished; this is the case however, with all diseases,

The favorable symptoms are diminished frequency of puls and heat of the skin, are interest on the part of the patient, in surrounding objects, gradual return of healthy secretion, clearing and moistening of the tongue,

Treatment— Before speaking of the treatment of Typhoid fever, it is necessary to inquire whether it be possible, by a vigorous employment of measures in the early stages of this fever, to cut it short. The question has been much agitated and many of the profession contend that it can frequently be effected.

Some have declared that here

cut it short by heroic doses
of quinine, but this we cannot
believe. Quinine is a powerful Mal-
arial antidote and cannot have
much potency in Typhoid fever,
unless the fever attacks a Malarial
diathesis,

There is very great unanimity in
regard to the treatment of this fever,
among physicians. There is very little
medicine indicated. The Oil of
Sassafras has been highly lauded
by some; but Spts of turpentine seems
to be a medicine peculiarly adapted
to this disease, indeed, our able prof-
essor of the theory and practice of
medicine, says that "turpentine is
as much a specific in Typhoid fever
as quinine is in Malarial." The dose

is grt 15 to 20 grt every three hours.

The following is the preparation used
by prof^r Bowling (Wig)

R Gum Arabic ℥ iii ss

Compound Spts Lavender ℥ vi

Spts Turpentina ℥ ii

Shake well and give a teaspoonful
every three hours, The turpentine acts
in some measure as a stimulant,
but chiefly as an alterative to the ulcer-
ated surfaces in the intestinal mu-
cous membrane.

Dr Woods, who I believe, first introdu-
ced turpentine as a remedy in Typhoid
fever, says that it is strongly indicated
when the tongue is very dry and
fails to clear off, continual tym-
panitis, weak puls etc.

But it should be given in the very

beginning of the attack,

The proper remedies for the various local affections, or incidental complications will naturally suggest to the practitioner as they arise,

The bowels should be kept gently open by the mildest laxatives or enemata. The greatest attention should be paid to cleanliness and ventilation; where the atmosphere cannot be purified by these means, recourse may be had to some of the charminc preparations. Patient should lie upon a straw matress and permitted to drink as much cold water as he wants,

The debility attendant upon the advanced stages of the disease, generally requires the use of tonics

and Stimulents,

The most suitable Stimulent
is wine whey, of which a Table spoon
full to a wine glassfull may
be given every hour or two,