AN INaugural dissertation
on
Typhoid Fever

Submitted to the
President, Board of Trustees, and Medical Faculty
of the
University of Nashville,
for the degree of
Doctor of Medicine.

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of
Tennessee

1853

W. T. Berry & Co.,
Booksellers and Stationers,
Nashville, Tenn.
We have heard and read a good deal of theory and speculation in regard to this disease within the last few years. It is thought that the Continent of the Middle and Northern States is identical with that of the Continent of Europe, France, Germany, Sweden, and which is frequently met with in Great Britain. The first attempt to prove the identity of the two diseases was by Hale of Boston in eighteen hundred twenty-three. Dr. James Jackson of Boston presented a memoir to the Massachusetts Medical Society in which he proved that the symptoms were the very same and the patients present the very same appearance in continued as he did when he died of Typhoid Fever. Dr. Nathan Smith instituted a comparison of Typhoid and Continued Fever, and say, that it is the same disease that he has been treating for Continued Fever for twenty years. Typhoid Fever is known under a variety of names. It is called in England Dysentery, and in the United States it is known by the name of
Typhoid and I think this appellation is least objectionable. It might be asked what do you mean by this word Typhoid. It means an acute affection whose anatomical character is an enlargement and special change of the follicles of the small intestines and always accompanied by increase of volume, injection, softening in the mesenteric glands and sometimes found in a suppressed condition. The usual symptoms of this disease are of variable intensity. The first symptom that presents itself is usually the stupor, prostration, pain and a gurgling sound in the right-illiac region and you frequently see an eruption, observed mostly generally upon the thorax and abdomen of rose color and it is said that it will disappear on pressure. This eruption is always more or less elevated above the skin. The patient will have meteorism in the abdomen and the belly will be full with gas which will distend the bowels to considerable extent. Dehydration is a pretty constant symptom.
in the majority of cases.

The anatomical lesions of Syphoidal fever are an enlargement of the follicles of the small intestines and mesenteric glands. The alteration of the follicles vary with the period of the disease. On a first postmortem examination of those who die from the fifth to the eight day after they are taken with this disease the exterior of the intestines opposite the glands present a red or black discoloration and some times are cover with a false membrane. On opening the intestines the glands of Peyer will be discovered to be in one or both of the following morbid condition. In the first place you find them either in a softened or hard condition and if they be soft the mucous membrane will be smooth or mammilated in some instances the gland have a calcified appearance; the tissue resembling the parenchyma of a cherry plums, and the mucous membrane being undetected.
The hard patches are more elevated than the preceding ones, and more elastic to the touch. The surface is plane and shining. This species occurs in about one third of the cases. Healing occurs about the ninth or twelfth day, and it is said there are two vortices: in one the ulceration begins on the mucous membrane of the mouth, which is destroyed, and in the other the yellow matter begins to soften and the mucous membrane consequently implicates, the mucous membrane being easily detached in sheets, to change over some times so very rapidly that it is imperceptible. The ulcers are of an oval or elliptical form. In some the edges are hard and thick, in other they are thin and the base of the ulcer is of a brownish color through out its whole circumference. The epidermis is sometimes perforated by the extension of the ulceration or from the separation of the eschar that is formed during the progress of the disease. These perforations are about a line or two in diameter and are found in the lower portion of the lumen when the altered patches are last few.
The number of patches vary in different persons, from one to twenty
five or thirty, and they bear no proportion either in number or
degree of alteration & the symptoms during life. You frequently
find all of the alterations just enumerated in the same patient.
The change from a diseased to a healthy condition is frequently
abrupt or a healthy patch is very rarely found between two dis-
eased ones. It is said that in non-ulcerated patches resolution
will not take place except in the ulcerated portion, in which there
has been no loss of substance. I do not know so well about this,
I think it is more than probable that resolution might take
place when there was slight ulceration but I might be mistaken.
The restoration of the glands, when they have been very exten-
sively ulcerated is very gradual, judging from the time the
patient is taken sick until he gets well. The mesenteric
glands are as constantly affected as the axillary glands.
Judging from all I can get from books, section scenes,
thy may with the shock of the disease. From the cyst this
fifteenth they are slightly enlarged & softened as in he from
a delicate rose to a deep red.
From the twentieth to the twenty-fifth the disease is more marked and yellow points of suppuration not uncommonly formed scattered over the tissue, and it is rare you ever see purulent collection in an abscess. I have seen it recorded in books that scarlatina, cholera, phthisis will bring about a diseased condition in the glands of Peyer and those of Brunner but not analogous to that observed in typhoid fever. In scarlatina Peyer's glands are said the occasionally increased in size but never contain any yellow matter nor do they ever ulcerate. In cholera they have been seen to increase in size but that is about all. The resemblance between the diseased condition in phthisis and typhoid fever is much greater than either of the two diseases we have just spoken of. The patches present on their surface small elevation, like isolated tubular follicles, and in some there are but few ulcerations whilst in others they are often deeply ulcerated. Tubular matter is not unfrequently found in the mesenteric glands. I have
read a good deal about secondary lesions springing up in the course of this disease, some authors say that the spleen is very much enlarged and may attain a size three or four times or large or when it is in its normal state; they also say that the mesenteric glands are in the same pathological condition as the mesenteric glands. Ulceration of the mucous membrane of the throat and esophagus are met with in a number of cases. The mucous membrane of the stomach is in a number of cases softened and some times ulcerated, and also the large intestines are to a very great extent diseased in a majority of cases. All this may be so but if they do occur it is very seldom. Typhoid fever comes in its malle of attack. It sometimes comes on suddenly and is distinctly marked in the midst of health, but more frequently it comes on in a very vicious manner guzzling as if it were hour by hour and day by day. The bodily strength begins to fail.
and the mental faculties were not so bright. Dr. Watson says that there is but one species of continued fever although there are many varieties of this fever. Whether the premonitory symptoms may be they exert some influence over the nervous system, upon which the old Pathological writers supposed the first direct impression was made by the exciting cause whatever that might be. But I think it would look more reasonable that the exciting cause brought fire on the blood consequently on the nervous system.

All the writers of the present day of distinction, for as I have examined concurs in that opinion, among the earlier symptoms of the disease are shivering headaches, dizziness which occasionally bears the lead, but these symptoms are observed the second week most usually. This disease has been divided into three weekly periods of all the authors who have written on the subject. The symptoms most annually observed during the first week indicate a derangement
of the sanquefrous & nervous systems. The patient
complain of feeling hot & has a frequent tho' full pulse,
and he (the patient) manifest-a great indifference to
every thing about him. In many instances his more
color strength is so much broken down as, that he in
unable to get up in bed at the same time cannot
lie on his side or turn himself in bed but remain in
a supine position. At the end of seven or eight
day, Typhoid symptoms are more fully developed.
If you purge him much in this stage the stool pass
him without him having any knowledge of its passage
the secretes will pass without his knowing or caring anything
about it. In this stage the changes that occur are
following. The pulse gets faster & more compressible.
The tongue assumes a brownish color becomes
quite dry. There are more terrors they are of dark
color accumulated on the teeth & feel when the disease
arrives at this point delirium nearly always set
in. Certain exceptions are after doping up on the
skin and those symptoms that relate to the nervous system are the most prominent. The headache that is complained of so much in the beginning disappears. The patient lies on his back if you place him here a tendency down over one side of the head, if you place him on his side he will not remain in that position any length of time before he will want to be turned back. Question when head and understood are slowly but voluntarily answered evidently in a bad head over the reflex being very brief and the perception of surrounding objects being very vague. A woman who is in this condition makes little or no effort to prevent the expression of her pain, the eye an inject brilliant, but have an expression of unusual stupidity. The pulse gets soft and often irregular and Dr. Stokes says that the first sound of the heart are very much diminished static sensation may be found in a good many cases. Complete deafness may prevail, with irregular involuntary movements of the
muscle of the arm, though those on the face upper lip twitch. The patient has a great disposition to vomit though generally it is tranquil but some times violent, the patient talks loudly and embrace the headroom about, some time he sinks he falls into a dreamy state, the coma somnolentium out of which it is with some difficulty he can be aroused for a moment. In this state it is with great difficulty that the tongue can be protruded which is sometimes observed to be of a bright red color though and looks like it has just been varnished. He swallows with difficulty any thing which may be handed him this may arise from Paralysis of the muscle of deglutation, or the mucous coat collect around the root of the tongue and render swallowing painful or impossible. The breathing of the patient at this period is that of a whistling sound he will on unfrequently have hemorrhage from the bowels. A peculiar odour...
thold from the body within Compare to that of mice; the rest of the body is some time ached, though will occasionally occur when generally found on the parts most exposed to pressure or the vacuum accept. Red and the chamber, or gangrene may affect the blistered surface on the skin when there has been simpson to produce counter incision. Roupsel relates an instance when the intercostal part of both legs became gangrenous so much so as to amputate both limbs. Towards the close of the second week or the beginning of the third a decided change takes place; if the attack is to terminate in recovery the symptoms abate, the oppression is more natural and pulse gets a good deal slower and steadier he takes notice of what is passing round him, the skin becomes moist and of a natural temperature and the tongue begins to clean itself rapidly, and some critical excitement as sweating not unfrequently precede this amelioration.
If the disease is known to be fatal there is a decided increase in the severity of the symptoms, or even one supervene. Typhoid fever may terminate in four different ways and the physician if he ever expects to be a successful scientific physician should study these ways diligently.

I think it is one of the most important things that the physician can learn in this disease in which often makes the patient victorious so that he may be able to anticipate the kind of termination most probable. Death beginning at the heart is most usual fatal termination of the fever. When the heart begins to lose its power the pulse becomes perfectly rapid and steady, in fact the whole surface of the body presents a congestive appearance, the tongue being dusky or livid, there is intense prostration, the eyes are half closed with the pupils dilated.

Death by Coma resemble, that beginning at the heart I have no doubt it is often confused with it. It begins at the brain the symptoms...
indicating a derangement of its function, of that organ insensibility, suspension of voluntary motion, the breathing is stertorous, imperfect respiration becomes impossible, the phrenic or related involuntary discharge of urine occurs, takes place, death from asphyxia ensues beginning at the breathing apparatus is owing, I think, to want of power in the heart, to propel the blood through the lungs, but this want of power in the heart may not be always the cause, for perhaps the blood may be forcing from passing through the lungs by other causes such as bronchitis, pneumonia. Death by dyspnea is not very common, I would suppose but it may take place when the disease is of long continuance. Perhaps it would happen often to those who have been subjected to debilitating treatment and not properly nursed during their sickness.

The treatment for this disease is Typhoid fever generally runs a definite course aided
a natural tendency to a happy termination.

Dr. Williams, of St. Thomas Hospital, London, used only simple remedies of warm water in sickly cases; all got well but one. I think this disposition to get well should not interfere with the medicine or miscellaneous activity on the part of the physician. There are numerous paths by which an attack of the fever can be cut short or its duration abridged in the least. All the treatment should be of an auxiliary character.

Dr. Watson says in the treatment of this affection he who knows when to interfere when not must be considered the safest and best practitioner.

A primary consideration of the epidemic constitution, for this as has been shown is constantly changing and forbids the idea of any absolute system of treatment being established. For in one year paralytics are demanded; care necessary and in another...
they do positive harm, stimulants are frequently
from the beginning. The epidemics may very
much in different places and should be particularly
noted as the guide of the general treatment. A great
object in the language of Cullen is to obviate the
tendency to death. General blood letting should
be resorted to with great caution, it ought not to
be put in requisition only when the necessity is
urgent during the first days of illness.
The patient should be placed in an upright
position and the circumstances which justify a
recourse to it are the unequivocal evidence of
local inflammation accompanied with a spell and
active pulse. Bleeding by large Leach, Pappen
head is less debilitating and usually quite
as efficacious in alternating cerebral abdomen
nal or pulmonary complications. Leach, must
be used with caution after the first week, the
hemorrhage stopped immediately on their removal.
At the beginning of this disease, precautions may be used with advantage, unless it begins to assume any degree. Local complication are the most frequent sources of danger in this disease. It becomes the practitioner's business to observe these tendencies and organic changes which may be detected. It is not unfrequently seen the pneumonia complicated with the disease when so far advanced that we treat them? They are often modified by the primary affection and associated symptoms, so that a general rule on not becomes well in their treatment, their effects differing widely from those resulting from them in idiopathic inflammation of the same organ. If these complications, spring up in the earlier part of the disease, blood letting would be the remedy, but it should be resorted to with great caution.

The bleeding should not be copious, but rather put in an upright position.

Cerebral complications should be combated by general...
and local blood letting if there be any such thing as
the complications you so often see laid down in the
books, but if there be much delirium, superficial
edema, there will be great benefit derived
from opium but it must be used with caution
and not until arterial excitement has subsided
or if there is any disposition to coma when coma
in profound Dr. Watson recommends highly a
blister on the head. Nervous tremor and
sudden frequent yells of Compulsor Musc of
Pain tenderness in the lumbo-
local and Coccal region are often relieved
by light warm
Paultics renders slightly
stimulating by sprinkling a few mustard
over them spirit of piperine fomentation over them.
The cause should be kept open by local
or enema throughout shock which causes
the decrease if there be nothing Dr. Contra indicate
If diarrhea be present of course it would not

be needed but on the other hand I would give small
doses of Opium & Chalk or if necessary a & larger
dose of Opium. If excessive I stop doses it will
be safer. A small dose of Tarantine or an enema of Tarapen
& Aouapetide & Schoenlein of Berlin recommend
as the most effectual remedy for the relief of the symptom
frequent enema of cold water. Carbonate of
Ammonia & Guinae should be given after the first
week if there be any accentuation of the symptom.
Wine & Brandy may also be given but this must be
judged by the attending Hygienic Physician. If
they increase or ozeugate the symptom they should be di
continued immediately. As a general rule however
their free use is attended with decided benefit & the
fault usually committed is not to omit & them early
enough. The Patient should be placed under the most
forceable hygienic condition, he should be withdrawn
from any thing which irritates him in the least. Perfect
quietude of mind should be maintained if possible.
together with free ventilation light-feeding & great drinking.
The body should be fumigated with warm water according to
the feeling of the patient & which venegor course of aromatic
spirits may be added. The mildest drinks, acidulated
may be given in small quantities. If prostration being
great the patient should have beef tea often that animal
broth with eggs & jelly. If there is one point the nurse
in this disease more than another it is the administration
of proper nourishment. Frequent enemiation should be made
of the front of the body most exposed to pressure. They should be subjected
to gentle friction. The bladder should be kept in proper condition
by draining of the water from time to time. During convalescence
he should monolong watch the return of nothing forbidden
receive immediate attention. A number of specific methods of treatment
for this disease have of late been proposed. One corps all with
furtative, another small dose of nitrate of silver, whilst another
found, the use of chloroform water. In a disorder where so may
recover spontaneously there are too many difficult succeed, or
fallacy & woman on attribute the power by one remedy.