

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.

BY

W. H. Cunningham

OF

Tennessee

18

CHARLES W. SMITH,

BOOKSELLER AND STATIONER,

NASHVILLE, TENN.

In giving
the Medical Vocabulary a rapid and
attentive perusal, We are forced inevitably
to the Conclusion that Typhoid Fever has
elicited more consideration from the en-
-thusiastic disciples of the Medical Science
than any other of the innumerable dis-
-eases that maintain a habitation in
every region of the created world.

It is one of the most comprehensive
subjects, that can possibly be sur-
-gested to the loftiest imagination, &
its beauty & sublimity, are com-
-mensurate with its intricacy and
complexity. It has been dwelt upon
by every variety of genius, as much
so, by the profligate Charlatan, who
prowls about the World, like the

midnight assassin, as by the dazzling
Luminaries of the medical horizon,
who ever & anon shed their resplendent
rays in such lavish profusion. But
alas it is a melancholy fact, that
this Avalanche of light has failed
to elucidate a subject so mysterious
& it will remain to ensuing ages,
an inextricable inmate of the
interminable Abyss of Obscurity.

What a formidable foe to the
human race is Typhoid Fever, —
nothing can impede its progress
& it surmounts in its career every
obstacle that is presented.

To no country,
or clasp of persons does it confine
itself, — it can be seen in the

hot + sandy valleys of the South, as well as the snow capped mountains of the North, + it visits the low huts of the poor, + enters the Palatial mansions of the rich.

Typhoid fever is very slow + insidious in its attack as will be seen from the following symptoms. It is far more insidious than Phthisis Pulmonalis, for there we have the deep hollow cough, the progressive Amaciation + the known hereditary taint to foretell the approaching danger. Far different is Enteric fever, — with it the unconscious patient, may have without the slightest suspicion, the deadly poison implanted in his

system. For days + even weeks, not the slightest warning is given, + at a moment when every look + action is redundant with apparent health, the Disease manifests itself + commences its fearful march in a slow + protracted manner, careless as it were; when Death draws the curtains over the fatal Tableau.

The patient as above mentioned may contract the Disease, + in the incipient stage it may indicate its presence only by equivocal symptoms, which if noticed at all, will be attributed to some every day occurrence causing a Depression of Spirits.

Thus in the case of a father, we have known such symptoms, as mental inquietude, loss of Appetite, +

restlessness at night, ascribed to grief attending the illness of a favorite child. It is peculiar in this, no other disease having the faintest resemblance to the striking character of its approach, progress & termination.

Typhoid fever as we have it shows no partiality in selecting its victims; with equal malignancy are they plucked from the bosom of the family circle of the opulent, & the filthy hovel of the indigent. No station however fair — no precaution be it ever so faithful, wards off the attack. The Mother blest in her new born babe, the Father in his prime, the aged man tottering in mind & body, & the prattling child scarce

blooming into youth, all are infected
& carried from the sweetness of life &
joy, to test the awful & impenetrable
darkness of death. It is everywhere
regarded as a disease full of
danger, but in no region more
so than in our own State. Here
indeed are we free from the
terrible Malaria of the South,
Yellow Fever has never traversed
our "Beautiful Valley," & to most
Epidemics, we are utter Strangers,
but alas; this we are unable to
avoid, & when its presence is ascertained
among us, the very fact casts a
gloom upon the community. This
winter it is prevalent & in some
sections extremely fatal.

The "fair city of rocks" is in almost constant gloom from its presence in her limits, & the burial of her citizens in the path of the Epidemic, marks its progress and fatality. It is indeed "a pestilence which wasteth at noonday & walketh in the darknef."

Though the first symptoms are vague & equivocal, it is otherwise when the Disease has taken strides in the System, as to be completely developed

The patient may complain of transient headache, pain in the back & extremities, unaccountable stiffness in the posterior Cervical region, there may be alternate flushes of heat & chilliness, the tongue if

examined will be found coated with a whitish fur. These symptoms may continue for several days, not of sufficient intensity to induce the necessity of retiring to bed, but gradually increasing & deepening till the disease is no longer masked, but shows itself in all the naked horrors of reality. It may however commence with rigors, followed by reaction, with distinct intermission or remission, & we have on several occasions seen it treated for Malarial fever.

But as before remarked, when the disease is fully developed, it stands, ~~it~~ as it were aloof in character from all diseases, & by the

Scientific Physician can never be mistaken. The bowels at this period are loose & of a Diarrhoeal character, or are remarkably susceptible to the action of Cathartics.

The chilliness & intermission succeeding the paroxysm disappears & it assumes a continued form.

There is heat & dryness of skin, thirst, nausea, loss of Appetite, a frequent feeble pulse, & compressible especially if the patient be a female. Sometimes when the patient is plethoric, when first affected, the pulse is full, strong, & frequent for several days, & almost imperceptibly sinks into an adynamic character, being

compressible & amounting to
120-30-40. beats the minute.
Headache dull & throbbing is here
invariably, & also another symptom
which seems at the first glance to
have no connection whatever with
the subject - viz: a hard dry
cough. Professor Bowling was
very emphatic on this point, "it is
says he" so intimately associated
in my mind with Typhoid fever
that I always anticipate it, & never
in the course of my experience have
I been disappointed." There is a
feeling of general soreness & fatigue
without the slightest previous exertion
on the part of the patient. Bleeding
from the nose is regarded by some as

as Pathognomonic of the Disease, but in this we cannot as searchers after the truth, coincide, & though but an Embryo in the high & noble Science of medicine; we may, to say the least endeavor to elicit clear & beautiful ideas of Disease, guided onward in our career as student by the light shed upon our path by the intellect & eloquence of those who have preceded us in our medical inquiries.

To refer again however to the subject after this slight digression the symptoms as the disease advances have little tendency to change, excepting in intensity — for in common parlance "they deepen as they go." The skin assumes a dusky hue, & is exceedingly

heated, the pulse is so feeble + frequent
as scarcely to be counted. The headache
though always present, unless the attention
of the patient is directed to the cephalic
region will not be felt; — i.e., — if asked
concerning it he will answer that it
inflicts intense agony, but otherwise
no complaint on the subject ~~on the~~
will be uttered. The tongue is
covered with a thick brown coating
which if there is any tendency to clear
away, will be thrown off in flakes
leaving a red, dry + shining surface.

The countenance is apathetic, and the
headache deepens into Coma or
muttering delirium — the patient talking
incessantly, his sentences disconnected,
losing the thread of his discourse, +

making inquiries as to the subject of his conversation. A strong idea now & then takes possession of the patient's mind, that he is neglected, & conceives that no one displays the slightest interest in his welfare. He imagines his dearest friend to be his greatest enemy & vice versa.

The Diarrhoea continues and is accompanied in some instances with blood, or the Discharges are consistent & dark, & haemorrhage if it occurs forms a fluid around the faeces in the vessel. The Discharges of blood per anum if copious are very debilitating & sometimes bring the Disease speedily to a fatal termination. There is pain in the Abdomen especially in the right Iliac region

3
+ Tympanitic symptoms present them-
-selves. Gangrenous eschars or bed
-sores, forms in the various parts ex-
-posed to pressure, as the hips, back
+ Scapulae. These are extremely indolent
+ the reason is obvious to all who
pay attention to the pathological
changes in the blood, — the fibrin
is lessened + of course the effused
lymph is converted into unhealthy
pus instead of fabricating new
structure. The tissues everywhere lose
their ordinary tonicity, + blood in con-
-sequence is effused from the mucous
surfaces, constituting Anal haemorrhage
+ Epistaxis, or effused into the areola
tissue thereby forming, Petechiae and
vibices.

+ physical powers are gone + not even animal instinct remains.

His vision is affected, + in his disordered imagination specks or particles, float in the air, + settle upon the bed clothes. This disturbs him + he endeavours to remove the cause of annoyance — presenting the almost laughable spectacle of an individual attempting to catch flying insects.

If the disease ends unfavorably, there is a great change in the pulse, it is feeble, fluttering + frequent, or slow + scarcely perceptible.

The surface is bathed in clammy perspiration, which exhales a nauseous + sickening odor. The extremities are

berest of sensation, the Abdomen is enormously distended, forming a convex line from the Xiphoid Cartilage to the Pubis. Iticough follows, the countenance assumes a cadaveric hue, + the patient passes quietly out of existence. In some cases, death is preceded by convulsive + painful struggles, + in that case we immediately conclude, that perforation of the intestines has supervened + consequent Peritonitis rapidly brought the disease to a fatal termination.

This is rendered still more probable if the occurrence of convulsions &c had the effect to arouse the patient from apathy + elicit expressions of pain in the Abdomen.

effect this the cells walls burst, a lesion of structure thereby occurring, plastic lymph is exuded & it quickly resumes its former structure, to go again & again through the same process. This is the modus Operandi in health & obtains in disease also, but in one like Typhoid fever, when the blood loses in great measure, its formative formative, it is obvious that instead of healing, the ruptured gland becomes the nucleus of an ulcer.

This we apprehend is the best Theory ever advanced by modern Pathologists in reference to ulcerated Peyers Glands, & they have been observed in every post mortem & in almost every stage of this Disease.

The Diagnosis is attended with great difficulty, when Remittent fever is prevalent — in some particulars resembling it closely, but the presence of low Delirium, Epistaxis, Haemorrhoea, & the peculiar a dynamic Type will render the Diagnosis comparatively easy.

With Meningitis there is some resemblance, in the symptom of Stenosed Disorder, but never (if uncomplicated) elsewhere. The existence of the Typhoid Epidemic will dissipate all doubts on the subject.

As regards the Prognosis it is a fact admitted by all physicians, who are at all conspicuous for the profundity of their

erudition, that it is a difficult matter to form an accurate Prognosis relative to this disease, so hypocritic is its character + to so many vicissitudes is its subject. It would be merely a supererogatory + superfluous proceeding to Prognosticate it.

Some of those in whose bosoms the Ravastating monster seats his Throne, are cheered up by the Delusive signs of recovery, but alas! how soon will they discover how chimerical are their hopes, for with all the powerful Artillery of Science, the Dread foe stands unsubdued in the Theatre of its glory, + Death the inevitable Lot of man, clasps to its arms the victims of the Conquest.

Typhoid Fever is exceedingly fatal, & in its path, are left behind its bloodstained tracks. In private practice about one third & in hospital, about one fourth, die.

Climate has certainly a great influence over it, being decidedly more fatal in cold than in warm regions. It may not be superfluous to remark that no case should be looked upon as desperate, & as long as the faintest glimmering flame of life is present, the energies should be exerted to prevent its entire extinguishment.

Among the unfavorable symptoms, are difficult respiration, steady continued delirium, profuse perspiration,

copious diarrhoea, melaena, Epistaxis,
haemorrhage from the gums, subcutaneous
tendinum, indifference to surrounding objects.

Should the case terminate favorably
there is increased temperature of the skin,
diminished frequency of the pulse,
increased moisture of the tongue,
abatement of Nervous Disorder, an
interest in those objects which while
we bask in the Sunshine of health,
steal upon our senses, like the
perfume of Exotic plants, & lull us
in the arms of Morpheus, like the
enchanted voice of music.

By way of premising the treatment
it, is necessary to state, that the
course of Typhoid fever is limited,
i.e., it has a stated period to run, &

+ our object in using them is not De-
-pletion, but merely the removal of the
intestinal contents, so as to keep up
their normal action. The Oleum Ricini
from its nonirritating properties, +
mild action is the best, + its
modus operandi may be accelerated
by the addition of a few drops of
the Tinctura Opii. Rhubarb from
its laxative powers, as well as tonic,
has been recommended + we have
no doubt of its efficacy, but in-
-convenience sometimes attends its
-exhibition, as will be seen when
we speak of Enemata. The
cutaneous + Renal actions must be
maintained, by them the effete +
disintegrated matters, are cast out

indications, as an Alterative, as
a stimulant & as a Diuretic.

On the Kidneys its im-
-provement though mild, is permanent
& its continued use throughout
the disease, has a beneficial effect
in stimulating the vital energies.

But Professor Wood & others
have remarked, "its alterative
action on the intestinal ulcers, is
what we desire. Dr Wood was led
to employ it from the fact, of its
beneficial action on external indolent
ulcers, rightly conjecturing that the
same results would be obtained in
the diseased glands of Peyer.

He says that when the tongue
parts with its fur in large flakes,

leaving the surface red, smooth,
& dry, that it is in consequence
of the occurrence of ulceration
in the Intestinal Canal, & it is
then that Turpentine is indicated.

Our own opinion in regard
to the exhibition of Turpentine is
formed from actual experience &
though we use it as a medicine
to promote granulation in the diseased
glands, we cannot as Dr Wood
regard it, almost in the light of
a specific. We hold that there is
no drug, which has the slightest
influence in checking the progress of
the disease, though we admit its
action beneficial.

When Delirium is of a high

character, + depends upon excitement of the Encephalon, revulsion + local depletion must be employed.

The cup + scarificator or leeches, applied to the Temple or posterior cervical region generally afford relief. Blistered surfaces are apt to prove indolent, but must be resorted to in urgent cases.

Hot mustard pediluvia + hip baths when convenient are beneficial.

But when the Nervous symptoms are of a ton character, + depend on Depression, the Cerebral Stimulants when employed sufficiently early, act like a charm. Hoffmanns

Anodyne, Camphor or musk may be exhibited. Opium in the form

of Dover's powder may be safely employed in this form of cerebral disorder. Not only are the nervous symptoms relieved, but sleep afforded, & the patient has a brief respite of his troubles in repose. When Tympanites & pain in the Abdomen are present, subfacia in the form of large poultices of mustard & meal, covering the whole Abdominal surface, continued without intermission for several days, afford signal relief.

Cataplasms to the back, chest, & extremities are useful as Derivatives. In copious Diarrhoea & haemorrhages, vegetable astringents are preferable. Opium & Kino.

generally checks the Discharge.

Should Epistaxis not yield to the above treatment, plugging the nostrils must be resorted to.

Gangrenous eschars or bed sores must be relieved from pressure by strips of Adhesion plaster or by cushions. Should they occupy a large surface & prove insupportable Lunar Caustic must be applied. Perforation of the intestines by ~~the~~ inducing Peritonitis is almost necessarily fatal.

Although some writers think otherwise, all we can do in that case, is to place the patient in a favorable position & keep his system under the influence of Opium, for

two or three days. The action of the remedy is this; pain is relieved & Peristaltic action made to cease, thus affording the intestinal opening an opportunity to close by granulation & cicatrization. It is doubtful whether patients recover after such a catastrophe & for our part we disbelieve it in toto.

As regards the Diet We may here mention, that it is by far the most important part of the whole treatment. In the early stages, it should consist exclusively of light & liquid preparations, so as to answer the purpose both of aliment & drink. Mucilage, Gum Arabic, rice water, Arrow Root,

toast water, Sago &c. These may be administered *pro re nata*.

In the last stages, when the vital energies of the patient are sinking & Nature about to give way under the extreme debility, diet more nutritious must be employed, both by the mouth & enemata. Essence of beef, mutton & various meat teas are ~~a~~ in requisition. These may be rendered more palatable by seasoning, or the addition of crackers, toast &c. As regards the quantity to be given the medical attendant must be influenced entirely by the effect, produced on the brain, pulse &c.

The room should be well ventilated, but an uniform temperature

maintained during Convalescence.

Great caution is requisite while Convalescence is progressing, for the slightest indiscretion often hurries the patient to that Goal from whence all hope of return is naught.

The Intestinal Canal must be regulated & daily opened by mild cathartics or laxative Ememata.

The Colligative night sweats are best encountered by the Mineral Acids as Sulphuric, Nitric and Muriatic Acids. Hectic fever sometimes retards Convalescence & for it the Sulphate of Quinine is best employed. The Diet should be as simple & digestible as the strength of the patient will allow.

We are aware that the foregoing production has thrown no light whatever on the subject. At the commencement we did not cherish the hope for a moment, that we had the ability either inherent or endowed to dive in the vast ocean of its obscurity & procure those facts which our illustrious Predecessors were unable to find. We are fully confident that this Essay is pregnant with the most glaring defects, but trust that it will not be too rigidly & severely criticised as we are just on the first round of that ladder, whose Terminus is on the proud & lofty Pinnacle of Fame.