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AN

INAUGURAL DISSERTATION

ON

Typhoid Fever

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BY

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OF

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Respectfully Inscribed
To
Dr W. T. Briggs

Typhoid Fever is a disease of recent origin; at least, it was not recognized as a distinct disease, and so described by our fathers. The first intelligible description we have of it was given in 1804 by Prost. Soon after this the medical world was completely subjugated by the dynasty of that wonderful prodigy, that arose in France; and held men and nations spellbound before him, while he forced them to admit that "all Fevers are dependant upon local inflammation. During the reign of this dogma the study of Continued Fever was entirely neglected, or what was worse, was most egregiously misguided and crippled.

But the false teachings of Broussais, this tyrant in medicine, were finally over-thrown, and successfully uprooted by

Chomel Andral & others. When Typhoid Fever was again investigated, and accurately described by Louis- and at a later period by various European and American Authors; Among whom may be enumerated Barthez, Sampson Smith, Jackson and Bartlett; who have thrown into the tide of medical Literature monographs on this disease of inestimable value.

The mode of attack in this disease is by no means constant. It may come on in the midst of apparent health, by a marked distinct Chill, followed by febrile reaction; just as an attack of malarial Fever. But this Chill is more commonly preceded by a series of premonitory symptoms

The patient complains perhapse of dull pain in the head, back or limbs says he is not sick, yet feels unwell. mopes about, sometimes in bed, some -times out_ Countenance dull and inexpressive; Has no appetite, but is rather indifferent, dont care whether he eats or not. Complains occa-sionally of some chilliness, some abdominal pain, attended by slight diarrhoea; more rarely bowels con-stipated. These symptoms may be aggrated and others developed seri-ation until the disease appears in its full semiological aspect. Or this indefinite illness may con-tinue for some days, then a sudden chill ensues and febrile re-action as in the first instance

The symptoms that follow in either case, varied and numerous serve to distinguish, with sufficient precision, this from all other diseases. After the Chill and during the interval when it is repeated there is irregular febrile reaction - Morbid heat of skin, general or partial. Flush of one cheek, or of both alternately; sometimes circumscribed resembling Phthisis pulmonalis - Skin, sometimes preternaturally dry, again moist, or in some cases bathed in a profuse perspiration. Some observers speak of a peculiar, semicadaverous odor from the patient; others have failed to recognise it.
Pulse may be but little excited

or it may run up to 140. It is most commonly "compressible"; sometimes sharp and jerking.
Dyspnoea occasionally occurs, from Tympanitis, or secondary Pneumonia.
Respiration commonly increased, hissing, sometimes stertorous.
Cough common, with slight expectoration, uncolored unless by blood from the nares or from Pneumonitic complication. Sonorous rhonchus generally present, occasionally mucous rhonchus. The Disease is generally marked by more or less mental imbecility, mostly of a low muttering form; though sometimes amounting to wild mania. This mental derangement occasionally remains after convalescence

The Countenance is most com-
monly a very good index to the
state of both mind and body.
A distressing vigilance may occur
and is to be regarded as a danger-
ous symptom: or the opposite state,
persisting somnolence may be
present, which may wear away
with convalescence or end in co-
-ma or in death. The senses are
frequently obtunded or perverted.
Muscular debility is a prominent
symptom disappearing only with
commencing convalescence.
Subsultus tendinum and Mus-
cae volitantes are frequent phenom-
ena in grave cases.
Tongue, covered with a light fur,
dark, or black; cracks, transverse

Tip and edges red, tremulous, point protruded with much difficulty sticks to the lips hindering articulation. This coating is thrown off in flakes, leaving the tongue fiery red, which is soon covered by another coat similar to the former to be excavated in the same manner. The teeth are covered with a black tenacious sordes. Anorexia common. Thirst, proportionate to febrile excitement, Pain in the stomache occasionally present, rarely attended with nausea and vomiting. Diarrhoea is present in most cases, fetid evacuations. Profuse hemorrhage from the bowels occasionally occurs. Frequent abdominal pains, especially in the right Iliac fossa, Hypogastric and

umbilical region. Sometimes
during apparent convalescence
the patient is suddenly attacked with
severe pain first in one part
soon extending over the entire ab-
domen, attended by tympanitis
rapid pulse, nausea and pinched
countenance; soon followed by
death. And post mortem examina-
tion reveals perforation of the bowel.
We generally find considerable
emaciation, owing doubtless to
the protracted length of the disease
It is not seen when the disease
terminates fatally at an early pe
riod. "The Urinary secretion, says
Nathan Smith „ is at first increased
forms in the vessel. Later it is high
colored, and still later a deposit falls in it.

This subject we think has not re-
-ceived that attention by Pathologic-
-al observers which its merits demand
Epistaxis is common, especially in
the early part of the disease, some
times requiring the tampon for its
suppression. During the second
week we discover on the person
of the patient, especially on the
abdomen, a specific eruption,
small rose spots, very little eleva
ted, one fourth of a line in diameter,
also a vesicular eruption may be
seen about the neck, called sudamina
From the poverty of the blood, gen
eral abeyance of the vital functions and
protracted confinement, frequent
ulcerations occur on parts subjected
to pressure, and on blistered surfaces.

Post mortem examinations reveal many pathological lesions. Some that are constant; others that are found occasionally. Heart, commonly soft, flacid its lining membrane sometimes pale; more commonly livid; containing blood. Aorta, likewise red within, containing blood The blood is defibrinized, does not exhibit the buffy coat; dark and fluid after death. Respiratory organs present no constant lesions - most dependent portions of the lungs sometimes carnified The brain generally presents less abnormality than would be expected from the nervous phenomena that arise during the progress of the disease. Occasionally some super vascularity, subarachnoidian effusion or slight ramollissement is present. Though less than indicated by the symptoms.

The Pathonomonic lesions of this disease are to be found in the digestive apparatus. We generally find the mucous membrane of the stomach, more or less removed from a healthy condition. It is reddened, softened, sometimes attenuated, and in a few instances ulcerated. Tis thought by the best observers that there is a want of correspondence between the gastric lesions and gastric symptoms. And indeed this is remarkable of almost every lesion common to the disease. Passing into the small intestines we still find elements of diseased action. Mucous membrane softened and reddened, in patches or zones. As we travel down the canal, the lesions become more striking and constant, till we approach the Ilio-

-ceal value, when we find that morbid condition peculiarly characteristic of the Disease - Inflammation or ulceration of the glands of Peyer. These may be found in various conditions, slightly elevated, or abraded, or ulcerated in different degrees, including the mucous membrane alone, or the submucous or muscular coat; or extending through the serous coat itself, constituting that horrible complication, perforation of the bowel. In the submucous tissue about these glands is to be found an infiltration of inorganized matter resembling tubercle.

Perforation is said to occur most frequently in mild cases; which can be accounted for, only, as Dr Bartlett suggests mechanically. The Patient-

having a greater degree of muscular strength, makes more movements & muscular efforts than he would if prostrate, and thus subjects the bowels to a force that perforates them at the points weakened by ulceration.

The large Bowels are sometimes the seat of slight ulcerations; and frequently of flatulent distentions giving rise to the marked tympanitic enlargement of the abdomen, so often observed.

The Spleen is most commonly found enlarged and softened. The Liver is also softened in most cases.

Of the remote Cause. The specific Virus producing in the human economy that train of morbid actions, known as Typhoid Fever we are profoundly ignorant. We know nothing of its

origin. Its introduction into the system or its modus operandi when introduced. Yet we may recognise certain extraneous influences, that will favor or counteract the specific action of this Poison. For instance age has much to do in rendering the system susceptible to its influence. Early childhood is comparatively exempt from the disease. As we approach manhood the susceptibility increases. The system is most liable to the disease from the age of 15 to 30. few cases after the age of 40, and scarcely ever seen in an individual over 50 years of age. Recent residence is also a predisposing cause. Immi-grants are always more subject to the disease than those accustomed to the

climate and locality. We cannot say that this Disease manifests any special proclivity for one locality more than another. It is of a truth a Cosmopolite- The world is its habitat; and the human family wherever dispersed its victims. The King on the throne and the beggar on the street, The gentleman of pleasure in the City, and the hard labourer in the field, The bold mountaineer and the timid tenant of the valley, are subject alike to its attacks. The cold algid north, nor the hot burning South can present a barrier to its resistless march. Nor is it influenced more by season than locality. It is the Disease of all seasons- The scourge of all climates, The dread of all localities.

It is a migrating Disease, infesting for a few years one vicinity; then without any apparent cause subsiding there to loom up in an adjoining neigh-borhood. Its most common aspect is epidemic. Sporadic cases occasional-ly occur - though we think a large majority of the, so called, sporadic cases are but cases of Mallarial Fever under maltreatment.

When a Typhoid epidemic is prevalent it stamps its impress on all other dis-eases in its vicinity, by engendering in every organism in its range a Typhoid or Adynamic Diathesis. We thus have Typhoid Pneumonia, Typhoid Dysentery, and in fact all the local phlegmasia will assume the Typhoid aspect. At such times we frequently

hear of Mallarial Fevers degenerating into Typhoid- which we suppose is erroneous, absurd. The Mallarial Fever attacks the man when the vital forces are in abeyance, the blood impoverished and the whole organism fettered by the Typhoid element in the atmosphere about him. He is treated without reference to this peculiar Diathesis; sinks and dies- and the poor Physician to save his reputation, which, to his own shame, is frequently more sacred to him, than the life of his patient, says "the disease degenerated into Typhoid Fever & passed the goal of Medical skill. The Physician committs a grievous error who fails at such times to recognize this peculiar Diathesis & who treats inflammatory dis-

cases with the same heroism he is wont to do under other circumstances.
As to a contagious element in this disease the medical world is undecided. Experiments are yet insufficient to give data for a conclusion. Some historical facts, also some analogical truths, in connection with the disease tend to prove that it is contagious. The disease has been known to appear suddenly in a healthy community, immediately on the introduction of a patient from another neighborhood laboring under the disease. Again Typhoid fever attacks the system but once. Almost all diseases that attack the system but once, are conceded

to be contagious - Typhoid fever is a self-limited disease, all other self-limited diseases are said to be contagious. Yet there is very high authority and even a majority of the profession against the position - Further experiments are necessary for the establishment of either theory.

The duration of this disease is rather protracted, compared with other acute diseases - rarely or never terminates before the end of the second week - most commonly continues for 4, 5, 6, or even 8 weeks. It is not prone to sudden changes in its progress either for better or worse. It rises, culminates and declines. And we think, most commonly too, independent, and frequently

in defiance of the remedies put in requisition for its cure.

The Sequellae are frequently to be dreaded; especially in a scrofulous habit: where it is apt to be followed by Tubercular Phthisis, that speedily runs its course to a fatal termination. Painful or swelled condition of one leg, and inflammation of the Parotid gland are complications that frequently arise during convalescence from this disease; and should receive some attention; but need not produce any great alarm as they most commonly terminate favorably. The Prognosis of Typhoid Fever will depend upon the aggregate of a variety of circumstances, which must be considered seriatim, and a conclusion drawn

from the sum of the probabilities.
A gradual attack is unfavorable.
Pulse over 120 or 130, with noisy hissing
respiration are alarming symptoms.
Delirium, if early, wild and violent
is ominous of evil; if transient
and easily dissipated not so danger-
-ous. Strong perversions of the mind,
as an idea, amidst grave symp-
toms, that there is very little the matter,
is almost certainly followed by death.
Early prolonged, and profound coma
or drowsiness is indicative of a fa-
tal termination; also constant
vigilance. Muscular agitation, sub-
sultus tendinum and rigidity of a
limb are symptoms almost invari-
ably followed by death. Early and
extreme prostration is indicative

of a grave attack. Pinched counte-nance cadaverous and Hypocratic denotes approaching dissolution; while re-turning cheerfulness and intelligence of countenance, returning recogni-tion of friends and increasing inter-est in his own condition and things about him, denote a favorable cri-sis in the disease even amidst very grave symptoms. Great dysphagia, strongly marked Tympa-nitis, urgent and continued diar-rhoea, involuntary discharge of feces hemorrhage from the bowels and reten-tion of urine are all considered grave symptoms.

In our Diagnosis, as in the Prognosis, it is necessary that we take a general review of all phenomena

individually and collectively:
as almost, if not all the symp-
toms may be seen occasionally
in other diseases. though not
in the same association.
By a careful analysis and syn-
thesis of all the phenomena occurring
in the progress of the disease, I appre
hend there can be but little diffi-
culty in diagnosing a case of Typhoid
fever from all other maladies.
The peculiar rose spot, gurgling in
the right-Iliac fossa, pointed tongue
protruding with difficulty and
the character and period, of delirium
serve to distinguish it from men
-ingitis and from encephalitis with
which it might be confounded.
But some difficulty might arise

in distinguishing it from Mal-
larial Fever or Dysentery in the
latter stages when they are en-
grafted on a Typhoid Diathesis. Our
Diagnosis in either case must
be based upon a careful examina-
tion of the history of the case from
the commencement. And indeed
it is better to commit an error
in diagnosis here, and treat these
diseases as Typhoid Fever, than to
treat them as Mallarial Fever and
Dysentery Per se, as this Typhoid
Diathesis must have a voice in
determining our prescriptions, where
it exists, or our patients die.
We think by a faithful examination
of the history of the case from the attack
we need not fail to recognize it.

The Theory of this disease has been the subject of much discussion; nor is the dispute yet ended.
Some contend for its seat in the brain - in the nervous system. Others, more plausibly, locate it in the alimentary Canal, in the elliptical ~~of~~ plates of the small bowel. Various other theories have been proposed - all tending too much, we think, to restrict it to some particular organ or apparatus. The most reasonable Theory, that which accounts best for all the phenomena and lesions occurring in the progress of the disease, is that which supposes the Disease to be a pathological condition of the blood, dependent upon a remote cause, a

specific virus; rendering it unfit
for the functions of life and offen-
sive the animal economy.
This Poison, the system is contin-
ually endeavoring to eliminate by
the various emunctories; especially
by the skin and glands of Peyer.
Hence we see the rose spot, and
ulcerated bowels, from an increas-
ed action to throw off this offensive
matter.
Various as the theories - nay various
as the myriad fancies of wild spec-
ulators in Medicine, have been
the plans of treatment proposed,
and put in requisition for this
self-limited, incontrollable disease.
Proof, incontrovertable, that this
disease, and much more its treat

ment are poorly understood.
We apprehend that the disease
itself requires no treatment. Or,
at least, in the present state of sci-
ence, we know no plan of treat-
ment that will abort or ab-
breviate the disease, in itself con-
sidered. (The recuperative powers
of the economy - the "vis medica-
trix naturae" will most common-
ly be sufficient for the cure;
unless the system fall victim
to some of the various compli-
cations that are wont to arise
during the progress of the disease.
These, it is the duty of the Physi-
cian, with constancy and vig-
ilance to watch; and to put in
requisition any means necessa-

ry for their subsural - Ever bear-
ing in mind the adynamic char-
acter of the primary disease, the
peculiar diathesis he has to treat.
The mind of the profession, gene-
rally is becoming rather averse to
to mercury as a leading remedy
in Typhoid Fever. We think its
use to any great extent will
most commonly prove detrimental
to the patient. Perhapse, under
certain circumstances a little
mercury in a mild form may
exert a good influence.
There is a strong tendency in
the human mind to ultraism,
to go to extremes. Thus we think
the Profession, terrified at the per-
nicious effects of mercury here-

-ically exhibited in this disease may suffer themselves too much embittered against it; and refuse to administer it when positively indicated. We should be careful, lest in shunning this rock of Scylla we are swallowed up in some Charybdian whirlpool equally fatal to ourselves and patients.

The mind of the medical world is now being turned, with considerable interest to Spirits of Turpentine. This is said to be the sheet anchor "The sine qui non," in the treatment of this disease. It is doubtless most an excellent remedy: But we think in all probability there is more virtue attributed to it than it merits.

We cannot consider it a specific. Nor can we conceive that there is any tendency in the means apparent, in the therapeutic action of this drug, to eliminate or to neutralize the remote cause, the specific virus of Typhoid Fever. But we think its sanitive influence is entirely local - relieving or tending to relieve a complication, universally present. The diseased condition of the glands of Peyer - If these glands were able to discharge the onerous labors thrown on them without taking on diseased action, Turpentine, we opine would be powerless.
To watch and govern any complications that may arise, and

to look well to the healthful
performance of all the function-
aries of the organism, comprises
the Physicians whole duty.
In the first place, the Patient
may be informed that he is
not soon to recover. Prepare
him for the battle.
If the glandular system be inac
tive and the bowels torpid

℞ Blue mass 10 grs
Ipecac Pulv 10 grs

Make five pills, one every two hours
followed by oil if necessary.
Give Spts of Turpentine 10 drops
every four hours - To be contin
ued until contraindicated by
convalescence or death.
If troublesome diarrhoea supervene

℞ Subnitrate of Bismuth 1 Dr
Nitrate of Silver 4 grs
Opium 6 grs
make twelve pills - one every four hours as oftener - Pro re nata.
If persistent epistaxis supervene, use the tampon. Hemorrhage from the bowels is best controlled by the injection of cold water, with an opiate if necessary.
The room of the patient should be pleasant, well ventillated. The clothes of his person and bed frequently changed.
Sponge frequently with cold or tepid water as the sensations of the patient may indicate. Let him take mild nutritious diet as he requires it; and cold water 'ad libitum,,.