

AN
INAUGURAL DISSERTATION

ON

Typhoid Fever

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BY

James E. Hough

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Typhoid Fever

This disease, as some might suppose, is not of recent origin. But notwithstanding it may have prevailed for centuries, it is only a few years that typhoid fever has been recognised as a distinct disease.

Since the pathological researches of Louis and others it is pretty generally admitted that it is as much entitled to rank as a distinct or separate disease as scarlet fever or small pox.

Authors have been greatly puzzled to find a name expressive of the pathological condition of this malady - several names have been proposed but none seemed to be satisfactory; so that we

have to content ourselves with the quite insignificant one above.

Symptoms— This disease is sometimes sudden in its attack, being ushered in by a chill and other symptoms common to febrile diseases. But generally the stage of invasion is scarcely perceptible, the patient only complaining of slight indisposition. As the disease advances the patient makes more complaint but is unable clearly to define his feelings—generally complains of head-ache and an indisposition to muscular exertion. The pulse is slightly accelerated but rarely increased in volume. The tongue seldom presents any change in this stage of the disease except that the tip and edges are

somewhat redder than in a state of health. There is a little fever at times, together with restlessness and a very slight degree of sensorial disturbance at night.

The bowels may be costive but more commonly there is a tendency to diarrhoea - the passages throughout the whole course of the disease being of a watery character.

After the disease has thus progressed a few days, generally a week, it appears to reinforce itself and the patient is admonished by his feelings that further resistance is impossible. This may be denominated the second stage, or stage of reaction. It is sometimes ushered in by a chill. The pulse is accelerated and sometimes as full as in ordinary remitt.

tent fever— at other times there is no perceptible change— sometimes it is even slower than it is in health.

The fever now is of pretty high grade and generally continuous so, with occasional remissions, for several days— say another week.

The tongue in this stage becomes furred except the tip and edges, and presents that narrow, long and red appearance which is so eminently characteristic of this fever. It also has a tendency to dryness— and sometimes instead of becoming furred it presents a remarkably clean and smooth surface. It is in this stage of the disease that the patient usually makes most complaint— generally complaining of more or less headache. Some experience other symp-

ptoms common to febrile diseases, such as pain in the back and extremities, soreness of the muscles and a restless feeling as if fatigued.

Epistaxis frequently occurs and is considered by some as being characteristic of the disease. Pain is seldom experienced in the abdomen except when pressure is made, it is then more appreciable in the right iliac region.

A tympanitic state of the bowels usually exists and a gurgling sound is produced when pressure is made with the hand.

Diarrhoea or a remarkable susceptibility to the action of cathartic medicines prevails during this and also the other stages of this disease. At the end of seven or eight days from the commencement of this period of the disease

The violence of the symptoms sometimes seems to abate, and one not well acquainted with the disease would be led to conclude for a day at least, that his patient was convalescent, but soon he will discover that instead of convalescence the disease is taking deeper hold on the vital organs.

It has now assumed the third stage, or period of depression, which is characterised by the subsidence of the fever, headache &c of the second stage and the supervention of a state of ease and indifference manifested probably in no other disease. The patient says he is getting well when it is evident to the physician and others that he is growing worse. Delirium sets in - it may be partial, or complete - the patient appears

to be sleeping but at the same time
muttering as if dreaming. The vision
is frequently perverted - hearing is
difficult, or there may be a ringing
in the ears.

During this stage it is not uncommon
for the tongue to become very dry or
parched and sometimes cracked, the
lips also - the upper one being drawn
up so as to expose the teeth which soon
display a collection of sordes. It is
with great difficulty that the tongue
can be protruded. Meteorism is more
manifest in this than the previous stages,
being clearly evinced by the gurgling
noise produced in swallowing liquids.
The patient complains of a peculiar dry-
ness and sometimes soreness of the throat.
Cough is not uncommon - generally dry

at first, but during convalescence it is accompanied with considerable mucous expectoration.

On examining the surface of the abdomen, spots somewhat resembling flea-bites may be seen - varying in numbers from two or three to thirty or forty or and sometimes more. This eruption is considered pathognomonic of typhoid fever - but it is not very useful as a diagnostic symptom from the fact that it does not make its appearance until the disease has made considerable progress.

This stage, like the two preceding, generally lasts about seven or eight days, after which convalescence usually takes place. Sometimes there will be a slight amendment of the symptoms for a day or two,

such as a return of moisture and cleaning of the tongue together with improvement of the general expression of the countenance &c. of the patient, and then the same train of symptoms may be renewed and continue another week. This alternation of symptoms is not uncommon in the severer form of this disease.

There are other symptoms which might be enumerated, but these are the ones by which typhoid fever is most generally characterised.

The cause of typhoid fever is not known. Some suppose it is produced by contagion, but the proof in favor of that doctrine certainly falls very far short of establishing the fact. Unlike most other fevers, it seems not to have any pref-

erence, or at least very little, for climate, season nor condition in life - prevailing alike in the north and the south, spring and fall, winter and summer - attacking the rich as well as the poor and vice versa.

The diagnostic symptoms of this disease are the slow and insidious mode of attack, the diarrhoea or peculiar susceptibility to the action of cathartics, the dry, red and pointed appearance of the tongue, the rose-coloured spots, the tympanitic state of the abdomen and the stupor or delirium.

The prognostic signs in this fever are very uncertain - the symptoms may appear to be mild and yet the patient may suddenly die - and on the other hand cases presenting

the most aggravated symptoms not unfrequently recover.

This, like other diseases, is more fatal some seasons than it is at others.

The mortality of the disease is variously estimated. About five per cent is the number most generally agreed on.

The favorable symptoms are diminished frequency of the pulse - the tongue assuming its natural appearance and moisture - return of consciousness and an abatement of other symptoms which may have been present.

The unfavorable indications are complete delirium, excessive subsultus tendinum, a notion on the part of the patient that he is from home and desires to return, hemorrhage or involuntary discharges from the bowels,

and coldness and clamminess of the skin. This disease, perhaps, presents as many anatomical lesions as any other, but it is especially characterised by inflammation and ulceration of the mucus follicles of the ilium, generally denominated Peyer's glands - The solitary glands of the ilium and also the mesenteric glands are usually affected in the same way.

Treatment - Before commencing the treatment of a case of typhoid fever it is highly important that the physician take into the account two general characteristics of the disease, viz: the tendency to diarrhoea and the natural duration of the malady - the latter of which cannot be cut short by any means known to the profession. Considering the

first, it is evident that active catharsis, a mode of treatment frequently resorted to in febrile diseases, would be injurious in this. And considering the second it is equally evident that active depletion either by purging or blood-letting will not do so well in this as it would in most other reactionary fevers.

A great deal has been said and written on the subject of treating typhoid fever—and almost every variety of treatment has been adopted, but after a careful examination of the whole matter I am led to conclude that our knowledge concerning it is principally of a negative character—that is, physicians know pretty well what kind of treatment is injurious to the patient, while on the other hand they know of no remedy that will cure the disease.

It must not be denied however that we possess articles in the materia medica that, when judiciously ^{employed}, exert considerable influence in conducting it to a favorable termination.

In the first stage or what is here denominated the stage of invasion, nothing is required more than to attend to the condition of the bowels - if they are costive recourse should be had to mild laxatives - if there is diarrhoea, it should be restrained by the use of anodyne astringents. It may be proper to state here that these two conditions of the bowels are to be treated as just directed, throughout the whole course of the disease. The patient should use a light diet and avoid exposure to heat or cold and also refrain

from physical exertion. It is not unlikely that many cases are made worse by the patient trying to "wear off his complaint" in persisting against his natural inclinations.

In the stage of reaction, in addition to the treatment recommended for the first stage, the remedies must be antiphlogistic. When there is great heat and dryness of the skin, cold water is the best antiphlogistic we possess. It should be applied to the surface frequently, by means of a sponge or soft towel. It may be poured on the head of the patient and if he desire it he may be allowed a free use of it internally. In the use of diaphoretics great care should be taken to select such as do not have a tendency to irritate the

bowels. Some recommend tartar emetic, but in a case of uncomplicated typhoid fever I think it is better not to use it - the indications which it is designed to fulfil may be met by other articles with less risk of irritating the bowels. Cold water, lemonade or the effervescing draught may be used with very good effect.

If there is not much fever, equal parts of spirit of nitric ether and camphorated tincture of opium - Teaspoonful every three hours - is as good as any diaphoretic that can be used in this disease.

Spirit of turpentine, either alone or in combination with other articles, is highly recommended as a remedy in this fever. Some use it throughout the entire

course of the treatment. Professor Wood of Philadelphia places great confidence in it in the latter stage of the complaint - especially if there is great deficiency in the secretions and a marked tympanitic state of the bowels. Professor Bowling of this University considers it almost a specific. He uses it from the commencement. Considering the unprecedented success which he has had in the treatment of this disease, I deem it appropriate to give a synopsis of his treatment, taken from my note book. It is as follows - bleed if the local indications seem to require it - commence with turpentine at the commencement of the fever - if the bowels are costive give a cathartic of oil and turpentine -

Then small doses of turpentine with gum-arabic and compound spirit of lavender.

R_x - Mucilage gum arabic ℥i^{ss}
Comp. Spt. Lavender ℥ss
Spt. turpentine ℥i

dose - table-spoonful every three hours.

If the fever is high sponge the body with cold water - allow no solid food - give chicken water - cold water ad libitum - lemonade - if diarrhoea occurs take, subnitrate of bismuth ℥i

Nit. silver gr i

Opium gr vi

make twelve pills - dose, one every three or six hours according to circumstances - if delirium comes on withhold opium and apply cold water to the head, cup or blister the back

of the neck - heek the temples - other complications to be treated on general principles - in the advanced stage administer stimulants.

A diversity of sentiment exists in regard to the use of calomel. Some contend that it is not necessary, and even that it is hurtful in any form of this disease - while others rely on it as a cathartic in the commencement and also as a sialagogue in the advanced stage of the complaint.

The truth in reference to this matter doubtless exists in a medium between these extremes. I have no doubt - but there are many cases in which it would be injurious, and on the other hand cases might occur in which it would exert a

salutary influence. It is not applicable to those cases which present a clean and rather raw appearance of the tongue.

In the third stage the treatment should be slightly stimulating or tonic. For this purpose carbonate of ammonia, wine or brandy, or quinine is most generally employed.

This disease is subject to various complications and modifications, which of course might require a corresponding treatment - but as this is my first attempt at a composition of this sort, I will content myself with having given a brief statement of what I conceive to be the symptoms, course, and treatment of a simple case of typhoid fever.
