

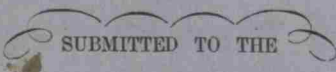


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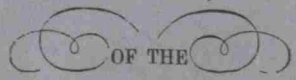
ON

*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

*A. J. Charlton*

OF

*Nashville.*



1855.

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NASHVILLE, TENN.



A

Treatise

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There is perhaps, no other idiopathic form of fever so generally and extensively prevalent throughout the world as Typhoid Fever; and as a consequence of this and of malignancy, it has been more carefully and more thoroughly studied than any other form of fever.

Its causes, symptoms and lesions have been investigated and settled by some of the wisest and most accurate observers that have ever adorned our profession. Prost was one of the first writers who gave an accurate account of this fever, in a work published in 1804. Andral and Chomel, some years subsequent to this, made important additions to our stock of knowledge relative to this disease. Drs Jenner, Petit, Magler, Barthez and Billiet have investigated this subject with much ability and care; but to Louis, more than to any other investigator, are we indebted for a correct understanding of this disease.

causes. The causes of fever have usually been divided into two classes, the predisposing and the exciting. The first, comprehends those circumstances which render the body susceptible of the causes which produce the disease. The second, includes such as immediately excite the fever.

Predisposing Causes. From the distinction made, it would seem that a certain predisposition is necessary, before the exciting causes can produce their effect; but it is not essential, as we sometimes see individuals in perfect health, being exposed to infection almost immediately seized with fever. A case is given by Marsh, of a clergyman, having enjoyed during the morning his usual health, and having performed the customary church-service of the day, visited, before dinner, a small parochial fever hospital. While speaking to a woman recovered from fever, he discovered that he was standing on straw just removed from the bed of a fever patient, in which there was much feculent matter. The

odour from thence struck him with force; he immediately felt pain in his head, sickness, and prostration. The same evening he had a chill, and fever of unusual severity ensued.

Fever is much more common at some periods of life than at others. It is rare in infancy, more common in childhood; but youth and early manhood are the periods of life, which are the most susceptible of the action of the exciting causes of Typhoid Fever. In old age, as in infancy, it is of rare occurrence.

Exciting Causes. Although much has been done in this branch of Etiology, the subject is still involved in much obscurity. All authors seem to agree that vegetable and animal substances in a putrescent state emit exhalations, which, when applied in a sufficiently concentrated state, are hurtful to the human body, and are productive of the most severe illness.

That noxious exhalations are generated from some

soils only, would appear from fever prevailing, in particular localities, I witnessed eight cases of Typhoid Fever in the family of Mr. C. during the past summer; and although several families lived within a half mile of Mr. C. out of his family, there was not a case of fever in the neighborhood.

In the region of country in which I practiced last summer, there are three distinct varieties of soil, one, a black loam with limestone, another, clayey, with sandstone, and the third, clayey with limestone. In the first, Typhoid Fever is rare, in the second it is of more frequent occurrence, and in the third it is more common than in both of the others.

Contagion has been, and is still considered by some, as the sole cause of Typhoid Fever. The proofs of the contagiousness of this disease are so clear and satis-

factory that few physicians can be found, who will deny its occasional origin from this cause; but to assert that Contagion is the only principle capable of producing it, evinces a very limited knowledge of the circumstances under which fever is produced. The cases that have occurred in my practice have usually been of the sporadic variety, and I do not think that one of the number could be attributed to Contagion, as they generally occurred in persons who had not been at all exposed to its influences.

Symptoms. The diagnostic symptoms according to Eschscholtz are headache, diarrhoea, stupor, delirium, petechiae, sudamina, epistaxis, intestinal hemorrhage, cough, eschans, fuliginosities of the mouth, and meteorism or tympanitis.

In the cases that I have seen the symptoms usually present, were; prostration, loss of strength, aching of the bones, soreness of the flesh, chilliness, succeeded by febrile excitement, nausea, loss of

appetite, foul tongue, and constipation succeeded by diarrhoea. The countenance had an excited appearance, which at a later period was converted into that of stupidity.

Delirium, sometimes constant, more generally at night, loss of vision, and deafness, along with sub-cultus tendinum, were symptoms which indicated derangement of the nervous system. I have met with but one case, which, either by symptoms or physical signs, denoted a pulmonary complication, and that one was complicated, from the commencement of the fever, with Bronchitis.

Epistaxis has usually been one of the early symptoms, and intestinal hemorrhage was observed in a majority of the cases.

Duration. From the difficulty of ascertaining with accuracy, the actual commencement and decline of the symptoms of fever; besides that the disease is more protracted at some periods than at



others; there has been much discrepancy of opinion among observers as to the duration of Typhoid Fever.

Hillary remarked its tendency to terminate on the nineteenth day. Fordyce puts its average duration at twenty one days. M. Grisolle makes the period of its duration to be from twenty to thirty two days. Dr. P. Smith tells us that it rarely terminates under fourteen days and seldom exceeds sixty days. The few cases that have come under my own observation have averaged about twenty three days.

**Prognosis.** Our prognosis, in all cases of Typhoid Fever, should be very guarded, as it is at all times, and in all cases a serious disease. For the first few days its character may be mild; but from a change in the character of the disease, - a congestion, or an inflammation of an important organ, the patient may be suddenly brought into a state of the most extreme danger. While on the other hand the

patient may recover from a combination of the most unfavorable circumstances. The prognosis will depend in part on the type of the disease, and the complications that take place during its progress.

Simple Typhoid Fever seldom proves fatal; and it may be said of complicated Typhoid Fever; that the probable issue depends, both on the importance of the organ affected, and the intensity of the inflammation.

My limited experience has taught me that cerebral inflammation is more to be feared than any other local inflammation arising during the progress of fever; and that the intestinal inflammations are more to be dreaded than the pulmonary.

The age of the patient, will in some degree, influence our prognosis. Youth and early manhood are the periods of life in which we see the greatest mortality. The temperament, constitutional powers,

and previous habits of the individual will materially influence the probable result of the case.

I have not remarked the recovery of a single case occurring in persons of the lymphatic temperament. The robust and the vigorous are likewise, very apt to perish. Those who have led temperate lives are more apt to escape the ravages of the disease, than such as have impaired their constitutions by dissipation and excess.

Particular symptoms indicate a favorable or an unfavorable prognosis. In Typhoid Fever it is of great importance to examine into the various conditions of the pulse. Slow, soft, and regular pulsations are good indications. On the other hand, a quick, feeble, and irregular pulse denotes great danger. If the respiration be of natural frequency, or but slightly increased during the paroxysms of fever; it is a favorable sign; but if it be much

increased in frequency and attended with cough, it may be considered of unfavorable import.

If the headache continues moderate, or when it has been severe, but has yielded to appropriate remedies, - when moderate delirium does not come on until a late period of the disease, - and appears towards evening; when the patient enjoys intervals of refreshing sleep; if with these symptoms the expression of the countenance and the eyes be natural; a favorable result may be anticipated. Muscae volitantes, floating before the eyes, and picking at the bed-clothes are unfavorable symptoms; and total loss of sight is a sure precursor of death.

The appearance of the tongue affords us satisfactory information. If, after it has been covered with a thick fur, it becomes cleaner and moister, it denotes a favorable turn in the disease, particularly, if this change be accompanied with a desire for food and an a-

lateness of the thirst, a red, dry tongue, it, as well as, the teeth, being covered with sordes, are unfavorable indications.

Tympanitic distention of the abdomen, - hemorrhage from the bowels or bladder, indicate a very serious condition of the patient. Other signs and symptoms denote the near approach of death. When the extremities become cold, - the skin bedewed with a cold, clammy sweat, - the countenance collapsed, - the respiration, short, interrupted, and laborious, and the pulse at the wrist imperceptible, the fatal issue is near at hand.

Treatment. Before prescribing for a patient affected with Typhoid Fever we should be particular to ascertain the precise type of the disease under which the patient is laboring, and the presence, or absence, of local congestion, or inflammation; the duration of the disease; the age; - the constitution;

the previous habits of the individual, his idiosyncrasies, and the character of the prevailing epidemic.

Sydenham's remark, that, "the remedies which cure in the middle of the year, may possibly prove destructive at the conclusion of it," should ever be imprinted on the practitioner's mind,

Bloodletting, In the type of the fever which prevailed in my neighborhood during the year 1854, general bleeding, so far as my observations extended, was not required in a single case; and even local bleeding, when practiced for the relief of organs in a state of marked inflammation, seemed rapidly to increase the debility of the already much weakened powers, and was not often resorted to by the best practitioners: but where there is real marked inflammation of some important organ, which threatens to destroy life if not speedily checked; local bleeding, or even general bleeding, if deemed advisable; may be

tried, and its effects narrowly watched. There have been, and no doubt there will again be epidemics, in which bleeding, venous, and will again be the physician's sheet anchor; but to such my labors have not as yet extended.

The emetic is useful in the beginning of the attack of fever, if there be nausea, vomiting or gastric repletion. The best emetic is a combination of 10. grs. of Ipecac with 2. grs. of Tartar Emetic, divided into two doses; the second to be taken half an hour after the first, unless vomiting should already have begun,

and mild aperient at the beginning is always proper, to remove any accumulation of feces, or morbid secretions that may have collected in the bowels. Calomel, or Blue Mass is very generally used as a laxative by the physicians of Tennessee, and throughout the South-west. For this purpose 10. grs. of Calomel, or 15. grs. of Blue Mass may be given

every night or every alternate night, to be followed the succeeding morning, if necessary, with a dose of Castor oil, or Epsom salts. The effect which the mercurials have on the secretions generally, and on that of the Liver in particular, recommend them to the favorable consideration of the Southern practitioner.

I have frequently prescribed these remedies with the design of bringing the system under their specific influence, and in all cases when I have obtained that effect, immediate and marked amendment was the consequence. Blue Mass is preferable to Calomel for this purpose. It should be given in ʒ.ʒss doses every 5, or 6, hours, and if there be much irritation, a few grs. of Dover's powder may be combined with each dose. Other aperients may be given, and repeated whenever necessary, such as Castor oil, Epsom salts, Rhubarb, or Senna; but in all



cases; indiscriminate purging should be carefully guarded against, as free purging in this disease is almost always injurious, being followed generally by increased languor, debility, and a host of other ill symptoms.

If the skin be hot and dry, much restlessness and vigilance, with a frequent pulse and dry tongue, we may administer cold acidulated drinks, with advantage. I prefer the bitrate of Potash, in the form of neutral mixture, or effervescing draught.

At the same time we may use the cold bath by affusion, or if this shock the system too much we may employ cold sponging with advantage.

We are disposed to recommend cold sponging in preference to affusion; this mode is easily applied, gives the patient no fatigue, and puts a check to restlessness, and the burning sensation in the palms of the hands and soles of the feet, which are so annoying to many patients. It may not be ad-

as it, be so permanent in its effects as the cold affusion; and certainly cannot be expected to cut short the fever, or even to moderate its duration; but as a grateful means of reducing morbid heat, lowering the pulse, and tranquilizing the patient, we believe it to be equally efficacious. For sponging I use simple cold water, or vinegar and water combined,

Should the tongue be dry and brown and the abdominal distention remain undiminished, the Oil of Turpentine, forms an excellent remedy. It should be given in mucilage of Gum Arabic, or Slippery Elm, or what answers a still better purpose in many cases, Peppermint and water. It may be given in doses of 2. or 3. drops every 2. or 3. hours, or 3. drops every five hours, Dr. Wood gives his unqualified approbation to this mode of treating Typhoid Fever. He says "I cannot impress, too strongly on the pro-

possess my conviction of the importance of this medicine, It may be employed in all cases in the advanced stages of this disease, when the tongue is dry and the pulse is weak; but there is a particular condition in which I have often employed it. In the latter period of the disease, - the tongue instead of clearing from the tip and edges, parts with its fur quickly, and in large flakes, generally from the middle or back part first, which is left clean and glossy; as if deprived of its papillae; but it not unfrequently happens that during the progress of the clearing process, or after its completion, the surface of the tongue becomes quite dry, and at the same time there is generally an increase of the tympanitis, and an aggravation, or certainly no abatement of the other symptoms.

The Oil of Turpentine acts in some measure as a stimulant, but chiefly as an alterative to the ul-

erated surface in the intestinal mucus membrane."

When the disease reaches the period of decline; if the pulse be very weak, and the symptoms of general debility be great; stimulants and nutriment will be required. Wine, Brandy, and Carbonate of ammonia may be given as stimulants. If the patient be troubled with exhausting sweat at this period; we may give Elixir of Vitriol, with a little Quinine.

In cases complicated with Bronchitis it may be necessary to give Carbonate of ammonia, or some other stimulant, to enable the patient to throw off the large quantities of mucus which sometimes collect in the air passages at this time.

Convalescence. Patients recovering from Typhoid Fever are very subject to relapses. The patient generally considers that the danger is over; as soon as, the fever disappears; and that nothing remains to be done, but to recruit the strength by nourishing food and active

exercise. The patient should not be allowed to sit up until he can do so without the least fatigue; and the same rule should guide him in subsequent exercise.

The proper regulation of the diet is of still greater importance. Stale bread, water crackers, Rice and Sago in small quantities may be allowed. After the fever has disappeared, weak animal broths may be allowed; and in the course of a few days, a little solid animal food plainly dressed may be allowed, unless there be special circumstances to forbid it. From this time the return to the usual diet and exercise may be gradually progressive.