AN
INAUGURAL DISSERTATION
ON
Typhoid Fever
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The use of the term Typhoid Fever, conveys to the mind no definite idea of the nature of the malady, to which that appellation has been given. Hence, different writers have proposed different names, which in their estimation were, in some degree, expressive of the character of the disease. But it is probable that no cognomen can be applied to the disease under consideration, which would be so significant of all the prominent features of the affection, as to justify any one in the rejection of the name Typhoid Fever. Typhoid Fever, then, is a continued fever, adynamic in its tendency, attended with lesion of a particular portion of the small intestines, and owes its origin to a specific poison. Much contrariety of opinion has been entertained by authors, in its regard.
to the nature of the poison, which is
believed to act as the determining cause of
the fever, as it is popularly called.

Some assert that the determining or
remote cause, is the same as that which
produces the malarial fever. But they
were doubtless lead into this error, because
of the existence of inflammation in the
mucous membrane of the small bowel.
This inflammation in their estimation
being caused by congestion of the portal
circulation, superinduced by the malaria.

But to refute this notion, it is only
necessary to enquire into the localities
and seasons, in which Typhoid Fever
prevails.

Others, believe and maintain the doctrine
that the remote or exciting cause, is a
specific animal poison. Or in other
words, that the disease is propagated by contagion, in the same manner that Small Pox and the other Erysipelas are, which are admitted by all to be propagated by contagion.

The theory of contagion has many advocates of acknowledged ability, and I may add that the arguments they are accustomed to use are by no means weak.

The fact, that many instances occur, in which those visiting or having visited persons laboring under the disease, are found to take the fever, after their return home, where no such disease existed, appears to be pretty conclusive evidence of the correctness of the theory of contagion.

Yet, those who deny the existence of any contagious element in the disease, will not admit that such instances prove that
the disease was propagated by contagion, but they say, that individuals, visiting those sick with the disease, come within the air impregnated with the peculiar acrid form poison, to which they ascribe the power of producing the disease.

And they say, that it does not always happen that those, visiting persons sick of the Typhoid Fever, take it; and moreover it is often the case, that the members of the same family are exempt from it, which would not be the case if it were contagious.

But this is not so strong an objection to the notion of contagion as one would suppose at the first glance; for the same thing happens often in diseases which are known to be propagated by contagion alone. But we learn from this that the poison is frequently generated in
small quantities or if but little malignancy. There are difficulties in the way, no matter which theory is adopted—contagion or non-
contagion. It is well enough under all circumstances to regard the disease as contagious, at least, until better evidence of its non-contagionship can be adduced.

Authors are in the habit of enumerating other influences, which are frequently found to aid or favour the action of the exciting or remote cause. These are the predisposing causes; the number of which is not a few. Any thing that depresses the vital functions of the human organism, may be considered as predisposing the individual to the influence of the specific agent in the production of this important affection.

A consideration of these need not take much time or space.
Almost every one has experienced the debilitating effects of sudden changes in the temperature, as well as the barometric condition of the atmosphere. Depressed spirits, intemperate habits, violent mental emotions, have all been placed in the list of predisposing agents. Although these have no specific agency in the production of the disease, yet it is said that the special agent would be entirely inert in many cases provided no such debilitating influences, as those above enumerated, were to act in conjunction with it. The predisposing, thus becoming the exciting cause in such cases.

After the introduction of the poison into the system certain morbid phenomena are observed, consequent upon its mortific impetus upon the economy, which symptoms, will not demand attention.
Writers generally describe certain symptoms, as occurring before the regular invasion of the disease. They are the prescindatory signs, giving warning that the disease is making or is about to make its incipience.

The expression of the patient's countenance alters; he becomes pale, languid, abstracted. He is not inclined to make any exertion either of mind or body. Slight exertions being sufficient to exhaust him. There is dull headache, especially in the morning; after perhaps unsatisfying sleep at night. There is a loss of appetite, the hunger being confused. The patient is neither well nor sick, occupying the half way ground; if such an expression is permissible.

These prescindatory symptoms may continue for three or four days, before the regular onset of the disease; or they may
not precede the attack at all, though they often do so, precede it, than otherwise. Then disease is then usually restored in by a chill, followed by fever, which is continued in its course. The pulse becomes frequent and hard, and perhaps at first fuller than natural; it often in very severe cases reaches as many as one hundred and thirty or forty strokes per minute. If sometimes, however, falls even below the standard of health. The average number of beats in a minute is about one hundred. But whatever be its frequency it generally remains at the same point, during the disease, until convalescence is established or till the fatal issue approaches. The patient at first complains of severe head-ache, which leaves him in
a few days generally. Delirium, may or may not be present; it is however oftener seen in the beginning.

Much has been written concerning the appearance of the tongue in this fever, its characteristic of the disease; its appearance being in all or nearly all cases the same, so that it is regarded by many as pathognomonic. It is necessarily red at the tip and around the edges; it becomes thicker and narrower and apparently longer than natural. It may be at first coated white, but it gradually, as the disease progresses, becomes broken; then a dark streak appears through the middle, which by degrees spreads over the whole organ, so that it is covered with a thick, black, dry coat. Later still numerous fissures may be seen traversing it, causing the
Tongue itself, to look as if it were cracked. This coat may remain on the tongue during the whole course of the disease, or else, as frequently happens, peel off leaving the surface smooth, raw and red; then if the case still progresses the same thing will be repeated, so that there may be several of these dark, foul-looking coats produced and successively cast off.

Another symptom of importance is diarrhea, which usually comes during the second week, sometimes however, being present in the beginning. The defecations from the bowels are numerous, having the appearance sometimes of the washings of meat, at others looking very much like pea soup, always very foetid. There is almost invariably pain, or at least tenderness, over the situation of the ileum and especially at its junction with
the bocceum. This symptom is one of the most constant of all the phenomena observed in the disease. There is nearly always in association with the diarrhea a tympanic condition of the abdomen.

During the second week there is also said to occur an eruption, which is peculiar to the disease. This consists of small rose-colored spots scattered over the surface of the abdomen. Hence, some writers have classed this fever among the "exanthematous" diseases.

The patient assumes a dusky aspect; his general appearance is altered, dark spots, or filthy looking deposits are seen upon the teeth and lips; the mouth is dry and clammy, rendering deglutition difficult, etc. There is great emaciation with loss of
innocent strength. The functions of sensation, thought and voluntary motion are much interfered with. The patient sees or thinks he sees, small bodies floating in the air, and he is continually endeavoring to catch them with his hands. Deafness or rather partial loss of hearing is often another manifestation of the depressed state of the nervous system.

The patient being all this time, in many cases, entirely sensible as regards his intellectual faculties, only being a little stupid, but not delirious. Often however, it is a low form of delirium, talking to himself in an unconnected manner, or else lying entirely unmindful of everything that is going on around him. Being stupidified by the circulation of the poisonous
blood, in his system, which exerts an influence. "Oblivious more than let this waters were," Along with these there is often seen another symptom, which is by many considered a very bad one, which is Subsultus Tendinum, involuntary twitchings of the tendons of the muscles and frequent tremulous movements of the soft or fleshy portions of the body.

Epileptics often complain of the disease; it is a symptom always to be feared, as death is frequently the result of the loss of blood in this way. Hemorrhage from the bowels is another occurrence much to be dreaded, though not always fatal.

The mortality in Syphoid Fever is not very great; the proportion of deaths to the recoveries being very small, for so grave an affection, manifesting so many
Symptoms, indicative of a low degree of vitality.

The diagnosis of the disease is not attended with much difficulty if time sufficient is given for the development of the signs, characteristic of the malady. A knowledge of the manner in which the patient is taken would quite suspend any suspicion as to what was going to follow, and suspicion would be converted into certainty, when the peculiar appearance of the tongue, before mentioned, is seen. More certainly, however, if the abdominal symptoms be present ...

The study of the Pathology of Typhoid Fever is full of interest, because of the light which it sheds upon many of the symptoms manifested in its progress. A depraved condition of the blood is presumed to exist in all cases. There is a great diminution of its plasticity, and perhaps of other vital endowments. The whole mass of the blood
is "touched importantly" by the morbid impressions of the remote cause of the disease. The peculiar symptoms, which relate to the nervous system, doubtless owe their origin to this poisoned condition of the blood. There is great laxity of the muscular fibres, consequent on the altered state of the blood; its fibrine being deficient in quantity. It is probable that the frequent occurrence of Epistaxis and hemorrhage from the bowels, is due to these two conditions—laxity of the tissues and deficiency of fibrine. The blood being deprived of a considerable portion of one of the elements, which serves to retain it in its vessels.

The anatomical lesions are often numerous, but there is only one that is peculiar to the disease—is always found to exist.
This lesion is inflammation of, or at, the glands of Peyer, situated in the mucous membrane of the small intestine, particularly in that portion designated as the ileum. It is proper that something should be said of the structure and probable uses of these glands, before a consideration of the change they are said to undergo, is entered upon.

They are described as being small, flattened bodies, situated as before described, and collected together in small patches, forming what are called the glandulae agminatae.

It is said by Physiologists, that they have no secretory ducts, but discharge their contents, by a destruction of their walls.

When the glands are destroyed at the time their secretions are poured into the lumen, and their place is supplied by
the formation or development of new ones.

Nothing positive is known at present, concerning their physiological uses. Several hypothetical uses have been assigned to them, but none of them are regarded as entirely satisfactory.

It is believed by all writers and observers of the disease that inflammation and irritation of these glands exist in connection with it. Perhaps an error was committed when it was just stated that all believe the state of disease in the glands of Regnault always exists for some do not believe in its occurrence in the disease. Some believe that the disease is essentially inflammation of these Regnian bodies, but this evidently, is contradicted by many facts observable in the disease.

It is hardly necessary to go through the steps, which are described as occurring in
these glands, during the progress of inflammation in them. Happier to say that they disappear, leaving numerous little ulcers behind them, which sometimes penetrate so deep as to perforate the bowel, almost necessarily producing Peritonitis and death, by the escape of the contents of the bowel, into the peritoneal cavity.

It has been a matter of inquiry, with all, who have devoted any time to the consideration of the disease, why ulceration of the bowel is found to exist in it. Some have supposed that this is nature's mode of eliminating the poisonous element from the blood; others, think that the remote cause, has a particular relevancy of action for these bodies, but it is probable that the matter can never be settled definitely. May it not be that ulceration is the result of the inability of expelled
nature to close up the breach of surface consequent upon the rupture of the glands in discharging their contents.

In the treatment of typhoid fever, all violent or perturbating remedies are to be withheld. Since it is impossible to cut short the disease by any evacuants whatever.

The rational objects of treatment are, to mitigate the severity of symptoms that cannot be wholly subdued; to reduce so far as art can reduce those dangerous complications which are incidental, but not essential, to the disease; and to aid the conservative efforts of nature, when these manifestly languish and fail.

Much will be gained in the fulfillment of these indications by the adoption of proper
by strict regulations. The patient should be
placed in as large a room as convenient, so
that pure air will be afforded him in suf-
ficient. Frequent sponging of the skin, when
hot and dry, will be found pleasant, as will
beneficial. This diet should be mild and nutri-
tious. If diarrhoea come on, it should be
controlled as speedily as possible. Anaesthe-
sis should be administered when indicated, so as
to procure sleep and repose. Bleeding from the
noe, should be arrested, if excessive, by plug-
ging up that organ. In fact all symptoms en-
dangering the life of the patient should be mi-
tigated as far as is practicable. If sinking of
the system comes on, the patient must be sup-
ported by stimulants, a persevering use of which
is often instrumental in keeping the patient
alive until the destroying angel shall
have passed by.