On
The Symptoms, Course, and Differential Diagnosis,
of Enteric or Syphoid Fever,
by
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The Symptoms Course & Differential Diagnosis
Of Enterc or Typhoid Fever.

Various are the motives which lead to the choice of a subject for an essay. Trust that I shall therefore be excused if, with the desire to learn rather than to instruct, I have been led into the following considerations, chiefly by the difficulties which they have presented to my own mind, and the wish to arrive at some definite conclusions for myself.

Concerning the real nature of the so-called Typhoid Fever, medical men have differed, and still differ widely in their opinions. Some maintaining that it is merely a modification of Typhus Fever; others—while they admit that in its main features it closely resembles Typhus—asserting that, in addition, it possesses a sufficient number of distinctive characters to entitle it to rank it as a separate species of Fever.

But the subject is still young. For although it appertains with his characteristic
The comment evidently alludes to the variety of fevers in treating of acute diseases with biliary discharges. Salmon, the first writer who distinguished fevers into Sanguineous and Bilious, founded his idea of the latter on the condition of the stools; it was only about the year 1763 that observation in this field of inquiry began to assume anything like a definite shape, when we have the writings of Rodriguez and Nagler; then in 1813 those of Petit & Lamee, and besides these many others who took up the subject until names of theories had accumulated to a perplexing extent. About the year 1830 those pathological conditions which we regard as characteristic of Enteric Fever attracted much notice, especially in France, where Desormeaux made elaborate investigations into its anatomy while Louis sought to ascertain its relations to Fever and gave it the name of "Typhoid" which might, with equal justice, be applied to many other fevers.

By none, however, has clearer light been
thrown upon the subject than by Dr. W. Jenner in his excellent papers on the identity or non-identity of Typhoid and Typhus Fever, published upwards of ten years ago.

At the present day many able and earnest writers are giving their time and attention to the elucidation of this interesting subject.

From this brief and imperfect sketch of its history we pass at once to the subject itself.

In no acute disease, perhaps, is the attack more frequently slow and insidious than in Enteric Fever; the patient in a great many cases finding it difficult or impossible to fix upon the exact date of his illness.

For a few days he, although still able to pursue his usual occupation, feels a want of energy as well as of appetite, with perhaps headache, weary forenoon, of the limbs, body, alternating chills that, and chilliness; his mind meanwhile becoming bitter or unnecessarily anxious. Is some or all
of these symptoms a certain amount of diarrhoea may be super added.

The rapidity or suddenness with which these symptoms increase in severity or become developed into the peculiar and strongly marked phenomena of the disease vary much.

Enteric Fever does not, however, invariably commence thus pleasantly. In another and equally large class of cases its onset is sudden; the attack being generally marked by a chill with headache and debility, followed by feverishness and thirst.

Once it has become fairly established in either way, the pulse increases in rapidity; the bowels have a tendency to be relaxed, connected with which condition there may be abdominal pain and tenderness on pressure, seated more especially in the right iliac region. The pupil becomes irregularly constricted, the face unequally flushed, the tongue perhaps furrowed. The capability for exertion having been gradually diminished.
Door opening the patient is at length compelled to keep his bed. Night brings with it an increase of the febrile symptoms, and sleep, if it be obtained at all is disturbed and unrefreshing. Diarrhoea, either frequent, or the result of purgative medicine upon intestines unusually susceptible of the action of such, moderate or excessive in amount, and perhaps accompanied with blood, may set in; the stools being of a peculiar character as we shall again see.

Between the eighth and twelfth day, seldom earlier, a few small, circular, papular, distinct rose-colored spots, which disappear or fade on pressure, make their appearance chiefly on the trunk, and often after remaining for three or four days, disappears, others coming out in successive crops during the course of the disease, these being usually from ten to twenty present at one time; sometimes they are more numerous, occasionally they are
altogether absent.

To determine with accuracy the duration
of a disease is generally no easy matter, es-
pecially if, as in the present instance, it
is one in which both the onset and com-
paration are marked by slow, gradual,
and almost imperceptible changes.

In a mild case of Enteric Fever the
above-mentioned symptoms may continue
till about the middle or end of the third
week, the march of the disorder being
pretty uniform and regular, when the
most important symptoms begin gradually
to abate. The diarrhoea becomes less frequent
and the stools in their character more
natural. The pulse recovers its normal
beat. The tongue cleans. The thirst abates.
The feverish heat and restlessness diminish
and finally disappear. Sweet tranquility
refreshing slumber closes the weary eyes.
Peace gradually returns to the troubled
mind; strength to the feeble limbs.
And the stomach, finding it no easy
tend to supply the rapidly increasing demands of the frame, would, if left unchecked, set to work in dangerous earnest.

This disease has not always, however, to happy a course and termination.

All the symptoms may continue with unabated or even aggravated intensity beyond the date of expected convalescence.

Delirium, taking the place of headache, may generally put down into coma. In addition to increase of diarrhoea there may be a sudden discharge of blood from the intestines, adding to the danger, if it do not even terminate life; or the intestinal disease extending itself may by impeding nutrition, lead to emaciation and weakness.

Poor and above these, cerebral or pulmonary complications arising may lessen the chance of recovery.

Nor do the febrile symptoms lag behind. The pulse becomes more rapid but weaker and more compressible.
The tongue deteriorates; it may be, in character while the gums, teeth, lips are covered with a dark brown incrustation. The stools are passed involuntarily. Bed sores, with all their lamentable sequelae, make their appearance on those parts which are most subjected to irritation or pressure; and from such a state the patient seldom recovers; death usually terminating his troubles about the end of the fourth week.

Such are the ordinary symptoms, course and duration of the disorder.

And now the question, naturally and necessarily arises: Are these symptoms sufficient of themselves to distinguish Enteric from all other forms of fever? Can we, or can we not, during life, draw the line between this and the allied species? Have we the power to determine the true nature of this disorder while it is still within our reach, and while a proper plan of treatment may yet be brought to bear upon it? Or are we, on the other hand, dependent on a post mortem examination for the
establishment of our diagnosis?

Now the only disease with which this has been confounded is Typhus fever, and consequently, for the solution of the above problem, it is my purpose to proceed in the next place to a more particular investigation of the individual symptoms of Enteric Fever in their relation to those of Typhus.

We have seen that in the majority of cases, Enteric fever commences gradually insidiously, and with premonitory symptoms

For out of seventeen cases ascertained by Dr. Jenner commenced thus; in the other seven the attack was sudden. In twenty-three out of twenty-seven cases of Typhus the disease set in suddenly, gradually with only four.

The aspects of the patient differ strikingly.

In Typhoid Fever you have not the stupid expression which characterises Typhus.

There is less apathy – more anxiety, and a partial, often circum-scribed flushing of the
cheeks, with pallor of the remaining parts, which is never seen in Typhus, where the complexion is "thick, muddy, and the flesh of the face uniform, and of a dusty red color."

One of the most constant and earliest symptoms of Oriental Fever is headache, and although this is an accompaniment of most acute fevers, it is, according to Lous, more frequent in this than in any other form of disease. Rarely wanting, its absence becomes a diagnostic mark of significance, when other important symptoms are doubtful; but it is of little importance in the present question as it would appear, on good authority, to be of equally common occurrence in Typhus Fever.

In both diseases delirium is of frequent occurrence, but appears later in Oriental Fever than in Typhus; according to Dr. Jenner "in three only of ten cases of Typhoid Fever before the fourteenth day," "in fourteen out of fifteen cases of Typhus before the fourteenth
day. It is, moreover, of a more active, or even pro Bacillus character in the former, so that frequently the patient will attempt to rise and get out of bed. Louis mentions cases in which patients presenting the most alarming symptoms, on being interrogated, have declared themselves to be quite well, and he states that among these he has never seen a single instance of recovery. In Syphilitic Fever the delirium is usually of the low and muttering type. Again the sufferer from Typhus Fever seldom speaks on any particular theme: his thoughts run on disconnectedly. While, on the other hand, I am led to infer from Dr. Purkiss' statement, the writings of Helbbrand, etc., my own observations, that in Syphilis the patient's mind has a tendency to dwell on some particular object or train of thought. Thus a Cowherd from the Country, fancying the patient who lay around him in the cold to be the accustomed objects of his care, endeavoured to put them into activity by a
particular cry which is employed for the purpose of amusing cattle in the Country.

"A thief proved of his theft, and accomplices, A faithful steward refused, with many acknowledgments, to taste his wine, as he had his masters legs, and it might render him unfit to perform his business", another patient "laboured under the painful and fantastical idea, during the whole course of his disease, that he was not only suffering for himself but for all his comrades in the ward."

A very common symptom of both Enteric and Typhoid Fever is somnolence, varying in intensity, from mere drowsiness to profound stupeur. It is however more frequent in the latter than in the former disease.

Coma vigil, "that peculiar condition in which the patient lies with his eyes open, evidently aware, but indifferent or insensible to all that is going on around him" is almost never met with in Typhoid Fever, while it
occurs pretty frequently in Syphilis.
In a considerable number of cases of Enteric Fever, muscular pains may be seen; the prostration being greater among those which end fatally, in the latter stage of which the muscles of the face, upper extremities and diaphragm may be affected simultaneously.
In Syphilis Fever also we meet with muscular spasms.
Prostration of muscular strength, which is met with in both Syphilis and Enteric Fever, is usually greater and appears earlier in the former disease. In the latter, although in many cases the prostration is extreme, of nineteen cases observed by Dr. Jenness two were able to leave their beds unassisted and with facility throughout the whole course of the disease. One of those patients died on the twenty-fifth day of the disease, and the other five weeks after his admission. Two could leave their beds with tolerable facility respectively up to the fifteenth and twenty-fourth day of the disease. Five could, though with
great difficulty, yet out of bed unassisted from the thirteenth to the thirtieth days; while ten were quite unable from the fifteenth to the twenty-sixth days; there was extreme prostration in eight cases from the fourteenth to the thirty-seventh days." In most of his cases of Syphilis the prostration was extreme.

The state of the senses demands only a cursory glance. He finds the Conjunctiva of the eyes much more frequently injected in Syphilis than in Contagious Fever. In the latter, the pupils are often dilated than contracted, while in the former the reverse holds good as a general rule.

Amongst the most common affections of the senses are blindness, tinnitus aurium, and dulness of hearing. The first often appears amongst the earliest indications of the disease. The second chiefly during the early or middle stages. The third is often present, commencing usually about the middle week, and slowly increasing.

The sense of taste is, as might be
rejected from the altered state of the parts, either diminished or perverted; so that substances, such as medicines which were disagreeable to the patient during health are swallowed without repugnance. These are symptoms of little importance.

We do not usually meet with any perversion of the general sensibility; although it is not uncommon to find it increased.

From these Nervous Symptoms, by no means unimportant in themselves, I pass with pleasure to others which may be said to form our chief anchor in the diagnosis of Enteric Fever, being as they are the direct index to those important disturbances or lesions which chiefly characterize this disorder. In the digestive and abdominal symptoms, do we mainly depend for our ability to separate this from the analogous form of Fever.

So little may the tongue of the Enteric patient deviate from the standard of
health that of the cases analysed by Louis
in half the number he found is moist
without morbid redness, being perhaps slightly
covered with a thin whitish or grey fur;
this condition sometimes remaining through-
out the entire course of the fever.
Again from being thus covered with a
tight or yellowish moist coating it may
become red at the tip and edges. But
further, turning dry, a yellowish brown
strip may appear along its centre, or
advancing yet another step, it may become
glazed, shrunken, and marked by longi-
tudinal cracks or furrows, with a deep red
entering covering surface.

Bearing in mind the two diseases, we
find that the tongue is often moist in
Enteric than in Typhus Fever throughout
the course of the disease. When it is dry it
is more frequently glazed and of a red color.
When dry the brown is of a yellowish rather
than of a bluish hue. The small dry
tongue, with red tip and edges, smooth fund
of a pale brownish yellow, and fissured, the surface seen between the fissures being of a deep red may "say it". Lennon: "be considered differentially as a diagnostic sign of Typhoid Fever."

Sometimes, however, the fur on this organ becomes dark almost black over the entire surface; or a layer of exuded blood may be spread over the tonsil, a similar coating covering the teeth gums lips; this being more common among adults than among children, and indicating great severity of the disease, more especially when the tongue is protruded with difficulty and with a tremulous motion.

The condition of the tongue does not appear to bear any direct relation to the state of the bowels; as it is often very slightly affected in the most severe cases, and vice versa. Perhaps it may, however, have a closer connection with the degree of general irritation caused by the intestinal disturbance or lesions.

The appetite for food is invariably
awanting; while there is strict proportioned to the degree of seriousness.

According to Louis in a slight majority of fatal cases, nausea, vomiting and epigastric pain were present. Nausea pretty frequently makes its appearance about the commencement of the complaint; vomiting generally occurs later: this holds true especially when greenish matters are thrown up; and these symptoms along with epigastric pain or distress occurring later, are believed by Louis, from the results of his observations, to be associated with gastric or intestinal lesion, the extent of which is proportioned to the duration of the vomiting.

The frequency of these symptoms in typhus fever appears to vary much in different epidemics. Dr. Petels states that the fever which occurred at Cape in 1847-1849 was preceded in almost every case by nausea; but, be it marked, it was in the language of the patients "an empty stomach."

Dr. Anderson found it in fourteen of
eighteen cases observed by himself on the first
day of the disease. In all of nine cases
examined by Dr. Shallock at the London
Physick Hospital these symptoms were absent,
and among one hundred and thirty-two fe-
male patients at the Royal Infirmary of
Edinburgh in 1838-39 nausea and vomiting
were present in only twelve, and in these
chiefly at the outset of the complaint.

Therefore nausea and vomiting, with epiga-
stric distress, especially if of short duration
or appearing late may be regarded as di-
agnostically symptomatic of Enteric Fever, when
as they are of only casual or accidental oc-
currence in Typhus.

Of Enteric Fever spontaneous diarrhoea
is perhaps as constant an accompaniment
as any symptom of disease could be expected
to be, the exceptional cases in which it is
entirely wanting, or the bowels even constipat-
ed being rare, as may be inferred from the
forty cases recorded by Louis in only three of
which it was absent.
Presenting considerable variations as to the time of its commencement, its severity and duration, we observe that in twenty-two of the cases mentioned above, it was present on the first day of the disease; in nine it appeared between the third and ninth day, and in six between the eleventh and fourteenth day; in the milder cases setting in at a more advanced period of the disease than in the more severe.

Regarding its severity we observe that in mild cases it may be altogether wanting or present only in an inconsiderable degree. In severe cases it is often very profuse, the number of stools passed in the twenty-four hours varying from one to twenty. According to Barthez and Allier it is always present in the entire form of children. In almost all cases, even where the actual diarrhea is wanting there exists an unusual susceptibility to the action of purgative medicines.

From various statistics it would appear that the duration of the diarrhea is generally in
proportion to the intensity of the disease; lasting throughout the whole course in some of the graver forms; either increasing or diminishing as the disease progresses; or, as in some cases, after a gradual increase, becoming stationary.

The stools are usually either of a pale dirty yellow ochre appearance, whence they have received the name of "pleasant stools", or they may be of a dark brown color resembling coffee grounds. Dr. Anderson again, thinks that they sometimes look as if chopped carrots had been mixed with them. "pleasant association, all of them! Their smell is usually offensive and fetid. In the heavier forms they may be serous or watery and are often accompanied with gurgling. Sometimes blood is mingled with them to a portable extent; or considerable and repeated hemorrhage may take place from the bowels, up to the amount of from twelve to fifteen ounces at once.

Now in Typhus Fever, on the other
hand. Spontaneous diarrhoea is very rare, being hardly ever met with except under circumstances which predispose to its occurrence in any disease, e.g. the seasons of summer and autumn. But even under such favoring circumstances it is met with in a very small proportion of cases, and the loose stools, when they occur either spontaneously or as the result of purgation, are of a dark, slumpy or putty character, rarely watery, and in a large majority of cases unaccompanied by pain.

Hemorrhage from the bowels is, moreover, of extremely rare occurrence in typhus. Amongst two hundred patients at the Royal Infirmary of Edinburgh in 1838-39 Dr. Henderson found only one instance of it, and when it does occur it is of a purulent kind.

Abdominal pain is a very common accompaniment of enteric fever. It is sometimes observed at the commencement of the disease, but often...
makes its appearance later, and may be later elicited by, or exist independent of pressure. Seldom diffused over the whole abdomen, more frequently confined to the region of the umbilicus, its most common seat is the right iliac region.

Varying in its character from a dull ache or distressful feeling to a severe colicky griping, it may suddenly change to an acute piercing pain, limited at first but rapidly extending, and accompanied by great tenderness at point, tympany, a rapid weak thready pulse, nausea and vomiting, great distress and a penetrated countenance, indicating the supposition of acute peritonitis from perforation of the bowel, and the near approach of death.

If in Typhus Fever abdominal pain is not of frequent occurrence, it possesses character very different from those which we have been examining. Being usually indication of constipation
and not of diarrhoea, it is relieved, instead of being aggravated by purgation. It is, moreover, far more diffused over the whole abdomen, or confined to the region of the liver, or the right iliac region. It is seldom met with.

Symptomatic distention of the abdomen, and walls is to some extent characteristic of Enteric Fever. According to the best authorities, this makes its appearance usually about the second or third week, at a later period, therefore, than the other gastro-intestinal symptoms. Varying in degree according to the severity of the disorder, it may be either altogether absent or present to such a considerable extent as to give rise to distressing dyspnoea by its upward pressure on the diaphragm. Not must we leave unnoticed the shape of the abdomen, which, in the language of Dr. Jenner, "is invariably the same, and somewhat peculiar. Its convexity is from side to side and not from above downward"
The patient is never pot-bellied, but tub-shaped, the cause being probably that the flatus occupies the colon ascending, descending and transverse.

In Symphysis Fever meteorism is very rare and it may therefore be regarded as an important diagnostic symptom.

In tympanitic distension of the abdomen a peculiar gurgling sound, called by the French "gargoullement" may be elicited by pressure.

It is a matter of importance that the condition of the urine in these fevers should be carefully examined. In Typhoid Fever there will usually be found an excess of albumen greatest at the more advanced periods of the disease. While in Symphysis Fever the albumen is in greatest excess at the commencement. In the former the amount of albumen goes on increasing, in the latter diminishing, during the course of the malady. I am not aware of any other important diagnostic marks to be obtained from this source.
Eruptions, occurring at any, although most frequently at an early period, is a pretty common event in Ontario Fever. In amount this may vary from a few drops of blood to a profuse discharge.

But hemorrhage from the mucous membrane of the nostrils is scarcely mentioned among the accompaniments of Typhus by the best authorities. Although I must mention that Dr. Rich's found it very common in the epidemic at Fort 10 already mentioned and which seems to have abounded in exceptions.

The characteristic eruption peculiar to Ontario Fever consists of minute round rose-colored papular spots which Dr. Read thus describes so admirably. They are slightly elevated. To detect the elevation the finger had to be passed very delicately over the surface, as they had never the hardness of the papules of hickory or of the first days eruption of Small-pox. Their apices were never acuminate, never flat, but invariably rounded
their bases gradually passed on to the level of the surrounding cuticle. No trace of a vesicle or white spot of any kind was ever detected on them. They were circular and of a bright rose color, the latter fading insensibly into the natural hue of the skin around. They never possessed a well-defined margin. They disappeared completely on pressure, resuming their characteristic appearance as soon as the pressure was removed, and this was true from the first to the last, from their first eruption to their last trace. They left no stain on the cuticle; they never passed into anything resembling pustules; the characters they presented on their first appearance continued till they vanished, their ordinary size was about a line in diameter but occasionally they were not more than half a line and sometimes a line and a half in diameter. "Ranging in number from one to a hundred or more at a time, each usually lasts for three or four days and vanishes, and new ones appearing every day or two"
in successive crops from a fatal issue. Their usual situation is on the abdomen, thorax, or back, and they are seldom met with on the extremities. In a large proportion of cases they may, by careful examination, be detected. Thus, althoughLouis amongst thirty-six fatal cases found the eruption in only twenty-five, yet subsequently in fifty-seven cases grave and mild, he succeeded in detecting it in all but three. Out of a hundred and twenty-one cases of Enteric Fever in young people Mr. Reppin found it absent in only eleven. Dr. Bartlett of New York rarely failed in finding it when a careful search was made. It was present in nine out of twenty-three cases analysed by Dr. Jenner, and by Turvey from observations made at the London Fever Hospital. Dr. Oude concludes that in about ten per cent it may be absent. In some cases the eruption is preceded by a pale scarlet tint of the skin lasting for a short time. According to the observations of Louis
and Chomel the spots make their appearance most commonly on the second week and often times during the third than during the first week of the disease. With children they are perhaps of earlier occurrence than with adults.

In Yaws Fever the eruption lasts till the termination of the fever undergoing changes from day to day.

It consists at first of slightly elevated dusky purple colored spots, flattened on the surface, never papular, and varying in size from a point to three or four lines, the larger ones appearing to be formed by the union of several smaller ones. They are irregular in outline, their margins blending gradually and imperceptibly with the surrounding skin; on pressure they disappear. Two or three days later they become darker assuming a brick dust color, cease to be elevated, and merely fade on pressure. In some instances the centre of the spot becomes dark purple,
and is unaffected by pressure, or the entire spot may undergo this change becoming a true petechia. They appear on an average earlier than the Enteric spots, and each spot lasts throughout the course of the fever.

Surely the distinctions between the two eruptions are numerous, evident, and very characteristic.

I must not omit to mention that in Enteric Fever the pulse varies more from day to day than it does in Typhus Fever.

Such appear to me to be the most important symptoms and signs by which the diseases in question may be distinguished from one another during life. But we may derive further material assistance from taking into consideration the nature of the prevailing epidemic, the age of the patient, perhaps his position in life, mode of living, and the locality in which he has been residing.
During an Epidemic of Enteric Fever we may, a priori, in a difficult case, expect the disease to be of that type; and so with Typhus. Should the Epidemic be of a mixed character—both diseases raging together at the same time— we may, to some extent, although to a much less extent, be influenced by observing which is the more prevalent of the two, and with which the patient is most likely to have come in contact.

Again, it will be useful to take into consideration the age of the patient. If young he is in all probability affected with Enteric Fever. If more advanced in years it is more likely that the attack is one of Typhus. The average age of the sufferers from the former being according to Jenner seventy-two years, while in the case of the latter it is about forty-two. Thus we seldom meet with Typhoid Fever in persons above forty years of age, while a large majority of those who suffer from Typhus are above that age.
It has been maintained by some—and not without a considerable show of reason—that the development or action of the morbid agent in Typhoid Fever is favored by famine and destitution, by over-crowding, and by insufficient ventilation, and that consequently Typhoid Fever is met with chiefly amongst the poor. Whereas the poison of Typhoid Fever operates equally amongst the rich and the poor, is most prevalent in autumn, and would appear to be connected with emanations from decaying organic matter; although against this last supposition it has been urged that in many cases, large numbers of persons have resided in localities where this alleged cause must have been in constant operation, without apparent detriment to their health; and that night-men and others employed in the emptying of cesspools are not only peculiarly exempt from such consequences, but even fallen on their disgusting employment.
It must not however be forgotten that habitual exposure to a poisonous influence often gradually renders the constitution proof against its action. Instances of this fact must be familiar to everyone: e.g. we observe that a drug taken internally for any length of time gradually loses its effect, the system becoming more tolerant of its presence or better able to resist its injurious influence. So it is with poisons. A confirmed opium eater is not likely to be poisoned with the same dose of opium which would prove fatal to an ordinary person. His constant exposure to the morbid influence has rendered him comparatively proof against its power. In like manner those whose duty it is to wait upon the sick enjoy a comparative degree of immunity from infection. So it may be with those who are, either by residence or employment, habitually exposed to the influence of decaying organic matter.
From what goes before it will purely appear that, in a practical point of view, the diseases in question are not only distinct, but distinguishable from one another during life; and the necessity for thus distinguishing them must be admitted even by those who maintain that, as a question of scientific nosology, they are essentially and fundamentally the same, as it is evident that the successful management of individual cases must depend upon this.

I am naturally led by the preceding remarks into a short review of some of the opinions that have been held in support of the identity of Syphus and Typhoid Fevers: the first that I shall notice being that Typhoid Fever is only Syphus complicated with lesion of a particular organ; the second that the difference in question depend upon variations in the epidemic constitution.

In the first place then, is it to be admitted, merely because we cannot
prove the specific cause of the one to be different from that of the other, that Typhoid Fever is therefore merely Typhus complicated with lesion of a particular organ?

If so the advocates of this view must by it account for all the deviations from ordinary Typhus which are met with in the enteric form.

We readily allow that such symptoms as the diarrhoea, the state of the tongue, the tympanites or even the daily variations of the pulse might thus be satisfactorily explained. But on the other hand, those who advocate the identity of the two diseases may justly be called upon to account for many other peculiarities which cannot, surely, depend on a merely local complication. Such as e.g. the differences in the mode of access, in the kind of the eruption, in the comparative duration of the disease, in the average age of the patients attacked, in the degree of communicability of the two poisons &c.
Again it has been asserted that the differences in question depend on variations in the epidemic constitution.

This view is, to my mind at least, sufficiently contested by Dr. Jenner's careful observations extending over a period of three years; for although the epidemic constitution must have been the same, the two diseases preserved their distinctive characters throughout and did not become assimilated in their general features as they ought to have done according to this theory. Nor could this view afford any explanation of the fact already mentioned, that whileTyphus fever attacks persons of all ages, Typhoid Fever is rarely met with above the age of fifty years.

On the other hand, it is remarkable that "of sixty eight instances in which from two to five persons with Typhoid or Typhus Fever were received into the London Fever Hospital from the same house or room, with one or two
exceptions, there was no instance in which cases of the two diseases came from the same locality — the same house or room."

I must not omit to mention that Professor Magnus Hess of Stockholm publishes some curious cases of opposite import, such as the following. "Aman had died, it was stated, of Typhus. The brother and his wife went to live in the house of the deceased, and used his clothes without previous airing and cleaning. They were soon taken ill and brought to the Hospital where they both died. The husband had persistent delirium, and a profuse petechial eruption, the post mortem examination showing no change of the intestinal glands; the wife had milder cerebral symptoms and a very scarce crop of eruptions; but on examination swollen mesenterical glands and swollen and ulcerated Pop's plaques were found in abundance."

But our point really exceptional cases no pound reasoning can be founded.
It would be extraordinary if such coincidences did not occasionally occur during a mixed epidemic. This winter I attended a boy who was ill with smallpox, and in the same house his younger brother was recovering from measles, while a third had just recovered from chicken-pox, and I might with equal reason bring this forward as a proof of the identity of the three diseases, which would be absurd.

Again, supposing that individual circumstances may greatly modify the type of this fever, as to give rise to two distinct forms almost indiscriminately in one place, how can we account for the fact that for forty years in Paris, and throughout New England only one modification of this disease has been met with to the entire exclusion of the other form?

Some talk of the two diseases running into each other by insensible gradations. Now it is quite true that we meet with...
many cases in which the symptoms are so faintly marked that the diagnosis is difficult if not even impossible: but that there are forms intermediate between Syphilis and Syphoid Fever is by no means to be thence inferred. For I must hardly remonstrate that difficulty of diagnosis, however much I may exhibit the imperfections of our art and science, does not prove identity, but is quite compatible with essentially and widely different diseases. But little experience is required to teach us this.

Now believing it to be true that a theory is of no value unless it is capable of explaining all known facts connected with the question, and that that theory is most worthy of acceptance which best and most simply explains them, I close this essay persuaded in the mean time of the Non-Identity of Syphoid and Syphilus Fever.