Acute Phthisis.

Thesis for

Graduation.

by

William Somervell Miller.

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Introductory Remarks.

It may be said that previous to the days of Laennec, Phthisis was a disease ill-defined and consequently misunderstood. Previous to the date of his excellent researches, the term Phthisis was a generic one, which embraced a numerous class of diseases, having their seat in almost every organ of the body, and being, by varying anatomical lesions, in this state of things, it is not surprising to find an ensemble of diseases of essentially different natures classified under the common head of Phthisis. Thus, the Liver and Kidneys, Larynx and Lungs, were alike the seat of the affection; and where no particular lesion could be discovered, the name of nervous Phthisis was had recourse to, in order to satisfy the morbid fancy.
Deviating for classification. All this error and confusion arose from ignorance of the true Pathology of the disease, and until Morton and Bayle, must be mentioned as having done much in clearing away the debris it was only when Laennec placed the essential character of Phthisis to be, "a deposit of tubercle in the lung," that anything like a precise direction was given to the study of this affection. Since his time, researches have not only contributed to confirm this general law, but have enabled us to diagnose the existence of Tubercle in the lungs, at every stage and degree of deposit, and also to separate it from every other morbid product in these organs; so that nevertheless of the absence of every "rational" sign during life we do not hesitate to recognize an individual as Phthisical, but when, by physical symptoms, presents proofs of tubercles in his lungs.

It may safely be affirmed that in no other disease is there such a complete chain, established between the symptoms, as derived...
derived from Auscultation and Percussion, and the lesions observed after death, as in Phthisis, or one in which, during life, the different phases may be so clearly made out; thus showing us, how powerful an impulse Pathological anatomy has given to correct diagnosis. However, as in many other affection, Phthisis Pulmonalis is susceptible of numerous variations in its symptomatology, so that, nearly all the usual appearances may be wanting, as it is found to take place in the more latent forms of the disease; or it may be complicated by heterogeneous deposits, which after disguising the principal lesion for many months the latter at length produces all its ravages during the last few weeks of the patient's existence. In the more acute forms of Phthisis Pulmonalis, we believe, that the deposit is purely tubercular and the Cause of Death is, either by the rapid development and maturation of the exudation in a circumscibed portion of the lung, or by the abundance and universality of that deposit.

A degree of uncertainty in the diagnosis, arise,
from the very rapidity of its progress. For, the
sometimes, it is nothing more than the usual
progress of chronic symptoms, running their
rapid course, at other times the symptoms
would appear to be completely different and
might easily be confounded with a typhoid
affection, or a Capillary Bronchitis.

In the study of the older authors who
mention Acute pulmonary Consumption, nothing
can be safely deduced from them, because of
the absence of any uniform or precise anatomical
characters. This in the excellent works
of Bayle that we find the first authentic
description; and tho' he does not use the term
"Acute," we conceive that at page 127 when he
speaks of "Pulviscus granulensa," he is really
describing a case of Acute Pulviscus.

Pott next points out the principal characters
of Acute Pulviscus, and his decisions leave scarcely
anything to be desired. According to him it is
an affection strictly tuberculous in its charac-
ter, which after remaining latent for a
variable period, develops itself suddenly, and
is universally fatal; and sometimes death
takes
2nd Edit.: p. 423.

Clinique allég.: t. 2., p. 371.

t. 2., p. 256.
takes place so rapidly, that the affection has not had time to produce the usual exudation, which assists in revealing the nature of the disease; and during life the patient may seem to have nothing more than a cataract.

More recently Louis speaks of the causes which assist in accelerating the unhappy termination of this affection; as by the lesion of other organs, the deposit of tubercle in the meninges, pleura, peritoneum and intestinal canal.

Audral mentions a form of Phthisis, which for sometime evinces the latent form of the Chronic Tuber, but which, becoming suddenly acute, shows symptoms, only differing in their rapidity and succession. He refers to cases, in which the principal symptom was hectic fever, without the usual physical signs, evidencing tubercular deposit, and in his annotations on the works of Lämmer, he mentions a special form of Phthisis which he calls "P. Asphyxiique."
Acute Pathesis exhibits as the principal lesion, a greater or less deposit of tuberculous matter in the parenchyma of the lungs, and it is rare, as we shall see further, that the other organs are spared affected with the same morbid deposit; although we believe that when it occurs in the infant, many organs are always more or less simultaneously affected.

Does there exist a constant form of tuberculous deposit in Acute Pathesis? Certainly not. We find in the lungs tubercles in every stage, and in every degree of maturity, from minute gray granules to small Caverns, as well as that form called infiltrated tubercles. This last description is comparatively rare in Chronic Pathesis, but both Louis and Gull have given instances of it. Rokitansky would seem
Seem to favor the idea that infiltrated tubercles, because of the rapid disappearance of acute phthisis, as will be seen from the following extract. "Infiltrated tubercle," he says, "unlike interstitial tubercle, is actually deposited in the Cavities of the air cells. It arises from more or less extensive croupous pneumonia, whose product, under the influence of tuberculous infiltration, becomes variously discoloured, and converted into yellow tubercle, instead of being absorbed or dissolving into pus. Hence tubercular infiltration presents the form of necrization or more strictly speaking, is necrization by a tuberculous deposit. The pneumonia product which was at first red & granular, gradually becomes of a duller & greyish red Colour, tinged with yellow, moist, of a soft fat or cheesy Character, and sooner or later, becomes disintegrated into tubercular pus. The granular texture, in the meantime, gradually disappears, while the tissue forming the air cells, becomes tuberculous, and the second portion, actually changed into a connected fluffy cheesy tuberculous mass, a condition
which Lobetius doubtless observed and mistook for fatty metamorphoses of lung substance. This form of tuberculosio may affect a whole lobe uniformly, or even a whole lung, according to the extent of the pneumatic process. This, however, much more frequently confined to one or more of the several larger or smaller separate portions of lung, and very often occurs as a lobular tuberculous infiltration, and in both these cases it is generally sharply defined. Finally it may occur as vesicular tuberculous infiltration, in which case it is the same as Bayle's pulmonary granulation, regarding which there has been so much discussion. It very often attacks the superficial parts of lung, as lobar, and lobular infiltration, and may be at once recognised by its external characters, by the pneumatic tendency and the peculiar colour of the diseased portion. It is always the result of a high degree of tuberculous atherosclerosis, and hence it only occurs in primary tuberculosio, but is, as a general rule, associated with advanced stages of interstitial tubercles. It gives rise
to the form of Petrie's which is tumultuous and acute, is accompanied with repeated attacks of Pneumonia, and is accompanied with much pain and distress." In reference to this quotation, we would only remark, that the results of the examination of the cases which form the basis of this paper, do not permit us to subscribe to the opinion expressed in the latter part of that quotation. We never found a well marked case of infiltrated Tubercle. This, it has been frequently found by others. In the greater part of our cases the Tubercle was milky, and disseminated through the lungs in considerable quantity; in 4 out of 5 Cases, the deposit was as yet in the first degree of evolution. According to Aurad, these milky bodies, are preceded at least in some cases, by the condensation of a little drop of real pus. But it may be remarked that these grey semi-transparent granules, have none of the aspect of concrete pus, and if there be any resemblance it is assumed only at an advanced stage of tuberculosis for a long time, both in France and Germany.
Traité des Maladies et tuteurs 1849.
it seems to have been denied that the military deposit was really tuberculous in its character, but the greater perfection of the microscope, and the advance of animal chemistry, have placed it beyond question. According to Debert, whose labours are the most recent, the proper characters of these productions are the following.

There are three constant elements: 1. There are molecular granules from 500 to 1000 of a millimetre in diameter, which are spread throughout the whole tuberculous mass. 2. An interglobular substance, which is semi-transparent, and of a greyish-yellow colour, which serves as a means of cohesion to the globules and granules. 3. Tuberculous globules, which constitute the essential microscopic character of this morbid product. These globules have a diameter of 140 to 120 of a millimetre, and having a cartilaginous content, are also polygonal; they contain a core of less transparent substance, with molecules of granules to the number of from 4 to 10. Sometimes, more, which have the appearance of nuclei. The colour of these globules, is pale yellow.
In all our cases, we have submitted the deposits to such examination, and found them to present this character. None the more advanced means of diagnosis has but confirmed Lacunae's opinion that these grey birefringent milky bodies in the lung, are but an early state of tubercle.

Having then be assumed as an ascertained fact that in acute Phthisis the tubercle is most frequently in the form of grey milky bodies, transparent, in varying degrees, and often of yellowish hue. In some few cases we find the tubercle more advanced, and it is seen frequently as in Louis' cases, times in 13 cases, all with the exception of three, presented some softening and cavitation at the apex of the lung, and one of our own Cases presented a similar.

The distribution of the deposit, seems to follow the same law in Acute as in the Chronic form of Phthisis, viz., in greatest quantity, and most frequently at the apex of the organ; and there too, they are always
more advanced, than in any other part of the lung. Sometimes the tubercles appear in greatest quantity below the pleura pulmonalis, forming a kind of envelope around the part, but in the vast majority of instances, they are distributed in the deeper parts of the lung. Sometimes they are equally distributed throughout the parenchyma; at other times they aggregate themselves in groups, and form masses by the coalescence of many together. However, this the general law is, as above stated, Louis has found many exceptions, and encountered tubercles the most advanced, near the bases of the lungs, and confined in some instances to that part alone.

The parenchymatous substance of the lung appeared in our Cases to be in a state of reparation in only one out of the five, but Louis found it more frequently, having 9 out of 13 Cases. But this proportion is very large, and it is evident he has had the chance to meet with such Cases, which a more extended observation, would probably re-
Congestion of the parenchyma is almost more frequently found, it indeed it is rare to find it absent entirely. It is principally found in the lower and posterior aspect of the organ. It is sometimes merely the effect of position, either previous to, or after death. This engorgement consists of an accumulation of sero-sanguinolent fluid, which exudes in an aerated condition when the lung is pressed after section.

In some cases, this depurization or pulmonary Consolidation, has a special aspect and is not confined to one quarter of the lung. This state may be found in patches surrounding tuberculous groups, whilst a little more distant will be found perfectly healthy parenchyma. Around cretaceous tuberculous masses and bony of various sizes, we find another form of Consolidation, viz. a hard Cartilaginous-like matter, breaking under the knife, this existed in all the cases quoted in which cretaceous masses were found.

Employees appear to be very rare in
in a rapidly debilitated condition of tubercle in the lung; it did not occur in any of our Cases, and Louis has not, we think, mentioned it.

The Bronchi, in general, do not present any morbid alteration of structure, with the exception of Case No. 2 we did not meet with any. Louis has found ulceration in the bronchi, and even communicating with the tuberculous ulceration of the parenchyma. He cites 3 Cases of ulceration in the trachea, 2 in the larynx, and 3 only in the Epiglottis.

The Pleura, presented in 2 Cases in the 5 recent adhesions, Louis has found traces of recent adhesions of pleurisy in 5 out of his 15 Cases, and in two of these five, the false membranes had already done traces of tuberculous deposit in them. Only one of these 5, also, was entirely free of adhesions. In all Cases the adhesions exist at the apex of the lung principally. Iaberele has been recently found in the pleura. In none of our Cases were there found any Pleuritisio.
pleuritic effusions, and we mention it made of it by authorities consulted. It is rather remarkable that the lesions of the pleura are so few and confined, a fact, which would go to strengthen the law promulgated by Louis, that there is a direct proportion between pleuritic adhesions, and the degree of internal change, and that very extensive or universal adhesions generally accompany talarular cavities of a notable size. Another observation confirmatory of those of Louis, is that of the relative rarity of extensive consolidations around the deposits of miliary tubercle in acute Phtisis. In Chronic Pulmonary deposits, we always find around softened tubercle, an induration and a chronic inflammation, such as sometimes to preserve the external figure and size of the lung, so as to fill the pleural cavity; but in the acute deposits, so far from this being the rule, these Chronic inflammations and indurations are exceptional, and we find only very recent and limited inflammations.
The Bronchial glands are seldom affected, at least not so frequently as in the more advanced condition of pulmonary tuberculosis, being found in the cases given, in the same proportion of the softened tubercle, or small cavities at the apex of the lungs.

The Intestinal Canal exhibits but few lesions, the mucous membrane of the stomach being in one case only somewhat redder and slightly softened and mamilated. Louis has noted 3 out of 18 cases in which the same membrane was in a similar condition. The small intestines were healthy, excepting in some rare instances the solitary glands were slightly enlarged, but not ulcerated, and as rarely in any case was any tubercle found in them.

The Peritoneum was universally healthy. The liver, having a little congestion was normal in 4 out of 5 cases, but the fifth was increased in volume, and somewhat advanced in fatty degeneration. This latter lesion would seem to be more frequent in
those cases observed by Louis, viz of 3 females who died respectively on the 49th, 50th and 80th day of the disease. The bile is noticed to be light in colour and limpid.

The spleen was found by Louis, to be augmented in volume, in 4 out of 13 cases, and this lesion, with softening took place in two instances in our subjects. The congestion and softening recalled to our mind the condition observed in Typhus & other fevers. It has been noticed by others to contain tubercle.

The urinary organs seldom present any special derangement. In one case only (234) we found little tubercle, yellowish, and somewhat soft, situated both in the cortical and tubular substances. Louis has only encountered this once in Acute Phthisis, & thus in Louis' 13 plus our own 5 = 18, there were only 2 in 18.

The brain and its membranes, were always found quite free from tubercle, and the cerebral mass itself was generally healthy; the incised instances there appeared a little
Elimination of its consistency, with a little vascular congestion. In no case was the Spinal Cord examined, but this has been examined by others, and universally found in a normal condition.

To recapitulate, in Acute Phthisis Pulmonalis, we find the different kinds of tubercle, or rather, degrees of tuberculation in the lungs, more generally deposited in large numbers in the form of milky granules of a yellowish-grey aspect existing equally in both lungs; and as regards the other organs, the tubercle is acute as in Chronic forms of Phthisis.

Many of the results above stated are a little different from those which have been found by others, as Louis, Waller, &c. We have not, for example, found the other viscera so frequently affected with the tuberculous deposit. But in the Cases given by them, besides Miliary tubercle, there was found in the lungs more or less of the softened kind, and even large cavities, implying a greater
greater advance and deeper taint, whilst in our Cases these were rare, the tubercle being almost confined to the miliary form.

Thus we then admit two anatomical forms of Phthisis, the one characterized by a deposit of tubercle which undergoes the usual transformations, the other, the simple grey miliary granules? This division seems to be sanctioned by an author, whose opinion in this matter is entitled to the highest respect. "Intercalization," says Rokitansky, "may be either acute or chronic. In the form called acute, the tubercular deposit takes place, either at once, or in successive crops, under the form of miliary granules, of a small size, and always in great numbers, generally divided or isolated, or may be confluent; sometimes in groups, and all about the same degree of development, that is, all in a state of evidency." He then adds that the acute form attacks more generally such lungs as are already the seat of soft tubercle at their apex, or even small Cavities.
We are inclined to subscribe to this opinion, and we believe that the deposition of tuberculous miliary granules, in a large extent, may be considered (when during life the acute symptoms have been marked) as one of the special features of Acute Phthisis.

Pasteur has found also that the anatomical character of true Acute Phthisis is exclusive by that of miliary deposit, adding always that it may appertain to the Chronic form also. Not infrequently we see, in the lungs undergoing, as they have died from Pneumonia; deposits of miliary tubercle alone, such persons having evinced (as far as necropsy would indicate) the symptoms of Phthisis for years.

We believe we have insisted sufficiently on the pathological characters of Acute Phthisis to justify the title, to prove that it is a form of Affection, which leaves such special marks as to warrant the consideration of it as a distinct form of Tuberculosis.
It might be expected that we should here enter into the nature and origin of tubercle, but it would be foreign to the object of this paper to do more than to glance at the principal opinions on the subject, and to state the views which have been adopted by ourselves.

All writers on the subject of tuberculosis seem to allow that the appearance of tubercular deposits to any extent or in any form, in any organ, must have been preceded by a certain vitiated or morbid state of the general constitution, known under the name of Scrofulous Cachexia. The general characters of Diathesis, and the evidence of its existence (if at all well-marked in the individual) are well known, and it is allowed that it may exist for a lifetime without having localized itself upon any particular organ. But when it does so and especially in the lungs, much discussion and difference of opinion have arisen, with respect to the particular manner and form of the deposit.
on the origin of tubercle, few make any reference to it at a more remote period than when they can describe it, as a small body of a greyish or yellowish colour; or a little semitransparent soft mass of albuminous matter; and taking this as the normal form of the deposit, they proceed to discuss, whether or not it is of inflammatory origin. But it must be evident upon the slightest reflection, that this condition of the deposit is really an advanced state of the lesion. Therefore before entertaining the question, whether tubercle is the cause or consequence of inflammation, we must take a glance of the exudation long prior to the state of crudity in which it is generally considered. It will be granted that it is an exudation, which has escaped either from the nutritive vessels proper, of the tissues of the lung, or from the pulmonary arteries. It must be granted also, that this exudation must have been liquid when it escaped from these vessels, and it is more than probable that it was nearly transparent, in a word, that it is
the liquor sanguineus, which has undergone some modification, either from the membrane through which it passed, or was of the same nature whilst in the vessels. Now, the question is, under what condition of the walls of the vessels, or surrounding parenchyma did this exudation first make its escape? Was it inflammatory or not? Was the same condition of the tissue of these parts which obtains during an attack of pneumonia, but that instead of pouring out healthy liquor sanguineus (which is eligible to be absorbed or converted into pus) yielded this abortive matter called tubercle, and which remained to be variously transformed? If inflammation be an exudation of liquor sanguineus, then the question would be settled, and tubercle could be set down as an inflammatory product. But without subscribing to this definition of inflammation, we would state our conviction that the deposit of tubercle takes place under circumstances strictly analogous to, if not identical with those called inflammation.
Andral and Pratellier admit that the elementary form of tuberculosis is liquid, but they assert that it is purulent from the beginning, and upon this supposition, endeavour to account for the softened caseous appearance of tubercular matter in more advanced stages. But it cannot be useful at the present day of advanced histology to refute such an opinion, as all now know that pus is the altered blood plasma after being thrown out of the vessels.

It is not maintained by us, that the tubercular deposit is the simple product of an inflammatory action alone; but it is respectfully maintained that congestion, even in a minor degree, in the glands or viscera of a person of a serofulose constitution, constitutes the principal condition in the development of tubercle. For example, when a serofulose person receives an injury in the hand, and an inflammatory action is set up, the lymphatic vessels inflame also, and their course may be traced by a hard red line until it reaches the glands of
of the axilla). Here these glands become hard and enlarged, and assume all the characters of large tubercles, and when they soften and suppurate, they yield the characteristic scrofulous fist. Up to this time the individual may never have exhibited anything but the external signs of Struma, as the tumified upper lip, clear delicate skin &c., but no sooner is a part irritated or congested that external tubercle evinces itself. Now that it is not maintained that it is the lymphatic structure of the lungs that is the peculiar seat or nidus of tubercular deposit, the cause and essential phenomenon are held to be identical, both internal and external parts of the body.

If it is an valid objection to our view of the origin of tubercle, that upon examination of the earliest deposit of it, we find no trace of inflammation; for it must be remembered that there is no as necessary condition in the parts rendering the inflammatory action persistent. Tubercle, like all other deposits arising in any part, has no tendency
Principes de Path. Pratique.

Stanius, "De la fibrine dans le sang nouveau chez l'homme," Gaz. Medicate.

to continue inflammation, the it may be the offspring of it, no more that pus on the surface of an ulcer, is a source of irritation to it, or serum infiltrated into any cavity, and we know that if the exciting cause be removed, the natural tendency of such evolutions, is benign and remedial, as may be seen in the oesophageal character of existing tubercle, under favourable circumstances.

Professor Alison, after reviewing the various predisposing causes of the scrofulous habit, says that "the effect of all these causes unaccompanied is to give a tendency to inflammation, however excited, to assume a peculiar chronic form above described, and likewise to predispose to the deposition in various parts of the body, of the substances called scrofulous tubercles, which are the foundation of the most formidable scrofulous diseases." He then enumerates a number of facts and considerations tending to establish the proposition, that tubercle is of an inflammatory origin, and first, "Their formation may be determined in various instances by the application of the
some causes which excite inflammation," such as Cold, injection of mechanical irritants, and he cites the instances of needle grinders, and other artisans as being peculiarly liable to Phtiisis, and infers, that what is so exactly.

"by mechanical irritation in a living part in a previously healthy animal must be a product of inflammation."

Again "the examination of the morbid parts, in cases where we see tubercle in its early stages, often show serofulvous tubercles, not only coexisting with, but graduating by insensible degrees into, usual acknowledged effects of inflammation + + + + " The tubercles matter in the lungs is often, as severe states, infiltrated, into cellular texture, and when so it is impossible to draw a distinct line of demarcation between it and the grey hyapatation of the lungs." From such Consideration Professor Alison infers, "that in certain constitutions, tubercle and all their Consequences are the direct effects of inflammatory action and may be prevented if that action be arrested or subdued."
It may be objected that the tubercular deposit is found most frequently in that part of the lung where Pneumonia or inflammation is most rare, and, that tubercle is found equally in both lungs while pneumonia is rarely so. But it is not asserted that pneumonia is necessary to elicit tuberculous matter; it is believed that a much minor degree of inflammatory action than that recognized under the name of pneumonia is sufficient to give rise to the miliary production, especially if the taint be well-marked. Many, many, the majority of our patients, on being interrogated relative to this, declare they never suffered from any severe malady than some slight cold, and which did not necessitate them to quit employing themselves as usual.

If it be objected to this view of the tuberculous lung, that the antiphlogistic treatment is not found to be that suited to Phthisis, it may be answered, that neither is antiphlogistic means suited to Pneumonia when it has gone the length of phthisilation and
and the original febrile symptoms have subsided. The most rational plan of treatment in this latter case, is to husband the vital powers, and assist nature in throwing off the abnormal deposit; and so it is in Phthisis. Tubercle; it is held by us, is the product of an action gone past, and like every other morbid production, must either be removed mechanically, or be got rid of by the powers of the system. So no one now thinks of meddling with the deposit of Phthisis, which is left to nature to dispose of, and all efforts are directed to support the Constitution until that is effected, and further, to prevent its continued reproduction.

It is not inconsistent with these views, that we find the pulmonary tissue surrounding the tubercle perfectly healthy, whilst we often find it considerably inflamed around such as have attained larger dimensions, thus originating the idea, that tubercle is rather a cause than a consequence of inflammation. But the fact is that these appearances are
far from being constant, and we have at one
time quite healthy immediately surrounding
both milky and softened tubercle, and at
other times, both connected with inflams.
And although advanced tubercle were con-
stantly marked by this condition, it is, we
conceive, what we would naturally expect;
for, when any cause of irritation is brought
to bear upon a tuberculated lung, where
would we look for inflammation to localize
itself, but in the vicinity of a body, which
must more or less predispose the tissue
to unhealthy action?

Professor Bennett, seems to enlist
himself on the side of the supporters of the
inflammatory origin of tubercle, as we have
heard him in his oral and other proceedings, often
state, and we have a passage from his
clinical lectures to the same effect. After
referring to the various causes of tubercle,
be says, "in the meantime the lungs become
especially liable to local congestion, leading
to the exudation of an albuminous matter
which is tubercle."
The opinion has been held that tubercle is neither the cause nor the consequence of inflammation, but a peculiar secretion of the tissue of the part in which it is found. At first it is liquid, and becomes gradually solid by the absorption of the more liquid portion. But no account is given of this new disposition of a tissue to secrete in any part, a matter so peculiar. And certainly the parenchyma of the lung and spleen, cannot be said to have the same power of doing so, as the brain.

Clarwell's opinion is that tubercle already exists in the blood, and only requires favourable circumstances to deposit itself. If it did exist already formed in the blood, and in a liquid condition, it could not have escaped detection, in those cases of acute Phthisis, where so much is deposited in so short a time.

We would conclude this part of our paper by again stating our belief in the inflammatory origin of Tubercle, but not as might be inferred from a quotation from Aiken.
Sawillius "De la fibrine dans le sang venus
Chez l'homme" Gaz. Medicale.

Bequerel. "Recherches Phys. et Pathol., sur
l'albumine du sang." Arch. Gén. de Med. 1850
t. xxii p. 156.
that it could be the product of inflammation in a "healthy animal," but that it is essential to the development of tubercle that the constitutional disposition be present.

The present state of Pathology does not enable us to say what this peculiarity of Constitution essentially consist of, and Chemists are not as yet agreed upon what are the observed differences between normal or healthy versus tuberculous blood. The following facts are deduced from information contained in the most recent work on Animal Chemistry, viz. that of Robin and Vendeil of Paris.

1. There exists a larger quantity of fibrine in the blood of Pithiecal patients, than in that of Standard health, a fact which would go to support our position of the inflammatory origin of tubercle. Normal blood contains from 1.34 to 1.54 parts of fibrine in the 1000, but the blood of Pithiecal patients contains from 3.07 to 4.91 in the 1000 parts.

2. That the proportion of albumen is also increased in Pithiecal. In man, the normal quantity is 69.40, in woman 70.5 in
Simon, as quoted by Robin et Verbeil.
the 1000 parts, whilst in Phthisis for man it increases to 74.70, for woman, from 79.02 to 87.90.

3 That the Globulin sinks below the normal proportion. In Health it is 125, in Phthisis it is as low as 74.94.

It must be remarked, however, that these analyses seem to have been made from the blood of such as had been debilitated by already developed Phthisis, and consequently do not satisfy the query, regarding the constitution of blood in such persons, the whilst they have not exhibited tubercular deposit, are accounted the most liable to do so.
Symptoms of Acute Phthisis.

The formation of tubercle in the lungs, evokes symptoms, somewhat different, according to the form of the disease, and the anterior condition of the patient. The different forms of this affection, will constitute the subject of some future remarks in another part of this paper. It will be seen that the disease may be either only a rapid development of already existing tubercle, bitteso latent, or it may be the first deposit of the morbid product in the organ. In some cases we find it impossible to detect at first the existence of tubercle in the lungs, especially when it is so limited as to give no alteration detectable by auscultation and percussion. But after a greater or lesser extent of time, in the two varieties of the affection, we find that in the one, the more rapid, there occurs a group of symptoms, well entitling the designation to the epithet "Acute", without passing through
through the ordinary phases of the Chronic kind, and therefore named especially Acute Phtisis; and the other variety, the symptoms seem to differ in nothing from ordinary Chronic Phtisis; but in the rapidity of time with which it runs its course, and in which and the tubercles softening and ultimately becoming small come.

The functional rearrangements which show themselves most frequently at the commencement of tuberculization, are, a febrile condition, more or less acute, disturbance of the digestive function, as anorexia or thirst, and marked depression of the muscular forces. This condition of languor existed in the most of our cases, during from two weeks to as many months.

The patients continued to be employed at their usual labours, but were forced to remark a diminution of appetite, a greater or less inaptitude for usual exertion of body and mind, and a slight cough. Then, all at once, without any apparent cause or after some slight cold, the patient is attached.
attacked by a violent shivering, followed by increased heat of surface, but rarely any sweating. From this time the fever is seen to increase gradually, a pain is felt in the side, or between the shoulders, which speedily becomes more and more violent. Breathlessness sets in and by degrees increases, and extreme anxiety accompanied the whole train of symptoms. At other times cerebral symptoms may seem to predominate, as delirium followed by coma. The thoracic symptoms are sometimes so slight as scarcely to be called morbid, more commonly, however, we find isolated places at first, with embarratent rales, which ultimately become abundant and ominous, and occupy, in the majority of cases, the whole extent of the two lungs, before as well as behind. At other times these symptoms are either altogether wanting, or very ill pronounced. Death may supervene by the aggravation of the cerebral, or the thoracic symptoms, and that occasionally in a manner very rapid and inexplicable. Or
it may take place in consequence of some complication, and most frequently by Pneumonia or by concomitant inflammation of the meninges.

This short statement of the principal symptoms, shows a great variety, and warrants a more minute discussion of them. In detailing the symptoms more particularly, it will be necessary at all times to isolate them from those resulting from the various complications, as Pneumonia meningitis of which sometimes renders the diagnosis erroneous, and at all times difficult.

At the commencement of Acute typhus, the languor of the patient is remarkable, during a variable number of days, and this feebleness becomes more and more marked, when the febrile attack has fairly set in, and it gradually increases until the fatal termination. However, we do not observe this depression to exist in the same degree, and the form of the affection, which we have ventured to call typhoid, presents it much more than
that form which may be named "Catarhal."

In acute Phthisis rapidly fatal, distinct emaciation is completely absent, and the degree of fatness possessed by the individual at the onset, seems to remain intact during the progress of the disease, or suffer but very slight modification. On the contrary in

chronic Phthisis, rapidly fatal, emaciation quickly appears, and seems to go on from day to day under the eyes of an observer.

The colour of the skin, and especially of the face, is a point of some importance, as well at the beginning, as during the progress of the disease. On examining the patient for the first time, we generally find the face normal, but when any well marked symptom has developed itself, the face is generally pale, the eyes somewhat sunken, or on the other hand, the integument is injected and red, the eyes brilliant. The pale type of face is seen generally in the Catarhal form, and the reddened condition, in the typhoid, and this high Colour is generally confined to the cheeks, as in

...
in Chronic Rhi"ritis. In one Case [No. 1] there was a diffuse redness over the whole surface without any definite eruption, and which did appear for a moment under the pressure of the finger, completely analogous to what we find in typhus fever. This condition of the skin tends to disguise the true nature of the affection, and must be remembered in forming a diagnosis.

The temperature of the skin in this affection was not ascertained thermometrically, but simply by the sensation afforded to the hand; it seemed to be in keeping with the febrile symptoms, and towards the end of the disease it generally became remarkably high. The patient in no case complained of it.

The expression of the face at the onset of the disease is generally natural, but when the symptoms are well marked it becomes very anxious, congested red, or pale, and sometimes a tint of violet with lividity of the lips. During the more severe stages of the disease the position of the patient appears
appears remarkable. Sometimes it is that of stupid immobility on the back, at other times the patient is constantly obliged to assume the sitting posture, the head inclined forwards and the face expressive of much suffering... in a word, the aspect and position are those presented by two grave affections, from which it must be distinguished, viz: Organic Disease of the Heart and Capillary Bronchitis.

The characteristic right event of Chronic Phthisis is sweating, in almost every case, one only of four patients showed any disposition to diaphoresis.

We have thus gone over the symptomatic phenomena deduced from the external examination of the patient, and they may be resumed in a few words, viz: the external characters of typhus fever, or some grave affection of the Respiratory organs. In Chronic Phthisis, rapidly proving fatal, the external symptoms are those ordinarily indicated, emaciation nocturnal sweats, hectic fever of...
The Cough is one of the initial symptoms, sometimes preceding, and sometimes following the febrile symptoms. It does not give much annoyance at the first, and occurs in paroxysms somewhat distant, but in proportion as the other features of the affection make progress, the Cough becomes more frequent. During the last days of the patient's life, it seems to the symptoms, most troublesome and embarrassing. Sometimes it is unaccompanied by any expectoration, but when the affection is free, it is generally viscid, aerated, and occasionally streaked with blood, but in no case is it rusty. In such cases, as signs and symptoms evidence of softened tubercle, the expectorations presented the usual opaque, mucopurulent tuberculous type.

Hemoptysis did not exist in any of the cases reported by us, and it is equally rare in those reported by others. For this in some instances, the expectorations were marked by a streak of blood, it is conceived that that could not be properly called Hemoptysis. The frequency of the Respiration
is one of the most remarkable of the symptoms of Acute Phthisis. It is marked from the very beginning, and gradually becomes more and more rapid with the rising fever. In all our cases it was considerably augmented, attaining 50 per minute. The inspirations were very short and accompanied by marked embarrassment throughout the whole length of the chest. The dyspnea, together with the Constrictive Painful feeling in the sternal region, are sometimes the most marked local symptoms, especially in the catarrhal form of the disease. Pain in the side is among the first symptoms in some patients, although in our cases, we have only once been called to note a pain in the side analogous to Pleurisy, increasing on the depth of inspiration or pressure of the hand. In other cases the patients complained most of a pain in the Sternal region, and of the most distressing oppression in the same region. The peculiar feeling of weakness, and want of appetite with Epigastric pain is generally extreme. When combined with marked dyspnea gives rise to great suffering. Menstrual has referred to their
to this Condition under the title of P. Physique.

The examination of the form of the thorax does not evince anything remarkable.

The local symptoms elicited by Percussion and Auscultation, are very variable, and in general quite inadequate of themselves to lend to a correct diagnosis of the affection. It is necessary to remember that we may be dealing with a case in which for the first time, tubercle is being deposited, or with a case where it has been latent in the military form for a time, and now beginning to commit its ravages. In the first of these cases we have had to deal with tubercle in some degree of advance, some having softened, and even formed small cavities. If these latter exist, surrounded by inflamed parenchyma, as in Chronic Phthisis, we shall find at these places, the signs just pointed out by Saunier, and known to all medical men. But the stethoscopic signs proper to Acute or recent Tuberculization of the Lung, are not so well known, and in general it is very difficult to arrive at this point of the diagnosis. However, the Respiratory Sounds

Sounds
sounds are very rarely normal. At the commence-
ment, in almost all cases, we perceive a certain
rudiments of the respiratory movement, and the
expiration somewhat prolonged, but we cannot
attach much value to these, as they are but
faintly pronounced, and the ear may be de-
ceived. The rales most commonly encountered
are the vibrilant and resonous, which are not
displaced by the cough, and sometimes accom-
panied by a crockling bruit. These rales,
which at first are confined to isolated spots
of the chest, exist in those cases where we
could find no zones or panchinoid infiltration
in the pulmonary parenchyma. After a
short time, we hear the resipitant or subsequi-
tant rales. These abnormal sounds occupy
the whole extent of the chest, when the disease
is very marked, both behind and in front.
Where we find the resonous or vibrilant rales,
we find also increased vocal resonance.

In acute pleurisy, these stethoscopic
signs, are remarkable for the extent of the
thorax through which they are heard, the in-
in some cases they are limited to certain spots.
The Intestinal Canoe presents but few marked symptoms, and in some of our cases was there found any anatomical lesion. Anorexia, and even disgust at food, thirst, a bad taste in the mouth, and a sense of heaviness in the epigastric region, are the symptoms which we constantly meet, and with one patient, these were the principal complaints. The colour and humidity of the tongue are very variable. Sometimes it is covered with a white Coating, at other times red, particularly round the edges. In the epidemic form of the Complaint, the mucous membrane of the mouth and gums, was slightly congested, and covered by a white Coating, which could easily be removed. Vomiting is a rare symptom, and not severe or often repeated when occurring. Diarrhoea, contrary to what is so characteristic of the chronic forms, is rare in acute Paralysis. We only did we meet with it, at all well marked, and in two others it consisted in two or three stools in the 24 hours. Occasionally, we found increased sensibility in the abdomen,
abdomen.

The febrile condition has already been noticed, but it is to be remarked that it is not always preceded by rigors, nor are these rigors followed immediately by a high degree of heat, or sweating. According to the accounts of the patients themselves, these supervene very gradually.

The pulse was in two instances only below 80, when the patients were first seen, in the other cases, it was above 80, and all gradually rose to 100, 110, 120, even to 140. As it accelerates, it becomes small and feeble. This is worthy of remark that the acceleration of the pulse is not always in keeping with an increase in the number of respirations per minute.

The central symptoms constitute one of the most important class of the features of Acute Parthiesis, for they may from the commencement mark, more or less, the other symptoms, and even lead to the conclusion, that they point to the brain as the principal seat of the disease. These symptoms occur principally in the typhoid form, and
and consist in intellectual aberrations, derangement of hearing and seeing, and different forms of delirium. Some frequently closes the scene.

We have never met with any serious lesion of the genito-urinary organs; the urine in general is normal in its character, once only being found by us albuminous. The Catarrh is constantly arrested in females.

The Symptoms of Acute Phthisis may be recapitulated in a few sentences. The disease in general commences with a febrile attack more or less violent, with perversion of the primary digestion, to which are added dyspnea and cough; these thoracic phenomena are sometimes accompanied by a pain in the side, more or less constiction, embarrassment at the base of the thorax, augmenting gradually, and accompanied sometimes with cerebral disturbance, which generally continues till the close of life.
Forms of Acute Phthisis.

We have already hinted that the variety of symptoms presented by this disease, admits of its being divided into several forms.

1. That form which should be denominated more especially "Acute Phthisis," in which the symptoms are quite different from those of the Chronic type.

2. That form which cannot be distinguished from Chronic Phthisis, either in symptoms or pathological lesions, excepting in the more circumscribed time occupied in its course.

The first form differs from Chronic Phthisis in many important particulars besides the mere duration of its symptoms, and may be further subdivided into three varieties viz.


1. Pyphoid variety. This is characterized by the general condition of the patient, the brief symptoms, as well as Valerianum, which
on increasing, the face is suffused, the general integument is red and hot, and the lips become generally in the course of the disease, coated with typhoid sordes, and the abdomen is distended with flatulence. Respiration is short, quick, and difficult, and the pulse high. It is said, that in some cases, even petechiae have been seen, but certainly they did not occur in any of our cases. In this variety the local symptoms are those common to it and the following, epistaxis and increased sensibility in the right iliac region are awaiting, the we find tenderness throughout the whole abdominal parietes in some instances. The differentiae diagnose will deserve minutely mentioned under the head Diagnosis.

2. In the Catarrhal variety, the prominent symptoms arise from the Respiratory organs. It commences with rigor, an increasing cough, frequent short respirations, obliging the patient to assume the sitting posture. The expectoration is abundant, and the pain in the side is rarely wanting. Auscultation only reveals certain mucus râles.
and the resonance of the chest is normal. The face is pale and anxious, the skin is very hot, and the pulse is accelerated. In the course of a few days these symptoms increase, and the patient seems to die of paralysis of the lungs. It will be remarked that these phenomena are similar to those observed in Capillary Pneumonia.

The cough is much more frequent in this form than in the preceding.

3. The Latent variety is more difficult of diagnosis than either of the preceding. An instance is found in Case 4. This patient, whom we take as a type of our description, complained of little cerebral symptoms, having only slight headache and occasional confusion of ideas. Anorexia, a bad taste in the mouth, some indication to vomit and afterwards diarrhoea, were the principal symptoms. These might easily be taken as the grounds of diagnosis of Gastro-enteritis, and Confessedly during life they led to this conclusion. Yet there was one thing very remarkable, viz. that after the knee being closed...
closed by an accession of suffocation, which was concluded, at the time, to be an exceptional occurrence.

Of these three varieties of the Puerperal Acute Phthisis, the Pneumonic is the most frequent.

The second division, viz., that in which the symptoms do not differ materially from those observed in ordinary Phthisis, calls for few remarks. The principal difference is in the duration, and the average time is seldom beyond a few weeks. The appearance of symptoms, such as the anæmias, night sweats, cough, and pain between the shoulders, are complained of by the patient as in Child's Phthisis, but the febrile symptoms are much more violent and continuous. We have not been able to meet with a good example of this; but we are informed that some occurred of late years, in the Edin. H. Infirmary.

To recapitulate shortly:—In studying the symptoms of Acute Phthisis, we may admit of one form really Acute, which...
may be marked either by Epilepsia, or Broulité, symptoms, or remain latent from first to last. And of a Second form, which constitutes either, the beginning, intercurrence, or final exacerbation of ordinary Pustules. These divisions go to support the opinion of Léonard that tubercles develop itself most frequently in successive eruptions.

Progress and termination.

The progress of this affection is essentially rapid, and from an average taken from cases stated by different authors, we can say that about 4 weeks brings on the fatal termination. The acute form properly so called, presents a great irregularity of its symptoms, in their degree and succession. In the only instance which we have encountered the duration did not exceed one month, and the disease had, as to speak, two periods,
One where the slight general adynamic symptoms exhibited themselves, and the other where signs of asphyxia supervened, which after a few accessions closed the scene.

In the other varieties, the initial symptoms present considerable variation. Sometimes the premonitory signs are slight and last many weeks, at other times, on the contrary, especially in the typhoid variety, the invasion is sudden, and followed almost without interruption, by the other and grave features. The period purely febrile, lasted from three days to nearly two weeks, and manifested itself by short delirium, and some cerebral symptoms more or less grave. The terminal period may be aptly denominated that of asphyxia, and lasts but a short time, rarely exceeding 5 days. In the form which we have named "Catarhal", death is preceded by distressing dyspnoea. In those who die in a state of delirium, this the breathing is accelerated, it is not difficult.

Complications
Complications.

Affections of the Pleura, Brain, and Lungs, are the principal complication, we encountered; and sometimes, the rarely, the peritoneum, and some of the abdominal viscera are involved. These lesions are in some cases the consequence of the extension of tubercular deposit, at other times they are the result of tubercle, i.e., the tubercle is the exciting cause of more or less congestion; we have an inflammation, pronounced in a variable degree.

Pleurisy, so frequently met with in chronic Phthisis, is still more so in acute Phthisis, and it is conceived that this leads to strengthen the position we have taken of the inflammatory origin of tubercle. Serosanguineous engorgement was found almost constantly, at least in a limited part of the lungs, and sometimes throughout their whole extent. It most frequently assumed the lobular form of Pneumonia; and so we have seen in one case, it occupied the same locality as the principal tubercle.
The sometimes subtilly marked, and we cannot always list its commencement. There are no new rigors, but sometimes slight pain in the side, which might equally exist, tho' not caused by inflammation of the Paranchima.

The physical signs, such as dullness, roughness of respiration, diminution of respiratory murmurs, Vibrateur rales, are all absent with Acute Phthisis, tho' there be no Pneumonia. The diaphoresis was not found Characteristic in these Cases, never having presented the husky Character seen in Pneumonia.

We have never had occasion to remark a true Bronchitic Complicating this affection, for tho' during life the consort and murmurs bronchii, increased Cough and abundant clear mumps, jeeves, might lead us to suspect it, the post-mortem examinations gave us evidence of further lesion that very slight congestion.

Pleurisy is less frequent in the Acute than in the Chronic Phthisis. In none from our Cases did we meet with any pleuritic effusion, and the adhesions when existing
existing were generally soft and recent. This is quite consonant to the law formulated by Louis, "that the pleuritic complications are in direct proportion to the affection in the interior of the lungs.

Tuberculous inflammation of the brain is almost as frequent as Pneumonia, as a complication of Acute Phthisis, but it may be questioned whether it is simple or tuberculous. Our means of observation will not permit us to answer this, as in none of our cases did we find any tubercle in the brain. The cerebral lesion consisted in the deposition of lymph on the arachnoid membrane, and looked more like a thickening and catching of that membrane. In all such cases symptoms of Meningitis complicated themselves with those of the principal lesion.

The only other complication we have encountered in this organ, was some tussacola deposits in the kidney, which did not during life show any appreciable symptoms. To recapitulate, the gravest and most frequently encountered complication of Acute Phthisis, is Pneumonia.

Diagnosis
Diagnosis.

We are now in a position to consider the diagnosis, and at the outset it may be asked: Is it always possible to diagnose this affection? Certainly not, and we are obliged to confess after the observations from our own cases, that the greater number of them were erroneously diagnosed, and that too, by persons of extensive experience. In three cases out of the five, and we suspect many more before death.

The premonitory symptoms do not aid us much, being scarcely more than those commonly found in the greater part of acute diseases. However, upon rigid interrogation, we may be able to ascertain that the patient has suffered more or less for some weeks antecedent to his application for advice, from some alteration in the respiratory function and from diminished muscular energy, and sometimes also, at some anterior part of his life, he may have complained of certain signs of tubercle, and if the tubercular character comes itself by swollen glands or, there will be every indication.
to direct particular attention to the Pulmonary organs.

There is no single symptom which of itself can be called pathognomonic of Acute Phthisis, or that could guide us infallibly to a correct diagnosis at the commencement. Neverthless the dyspnoea is more considerable than in the great part of the affections of the Respiratory or Circulatory Systems which cause it; and the in some instances it may be less intense than in Acute Pneumonia, yet we almost always want the evidence of effusion. If Acute Phthisis be already past its initial stage, and the fever be well marked, that will always keep pace with the dyspnoea. The local symptoms are for the most part little appreciable at the commencement, but we will generally find (especially in the second division of the affection page 51) some dullness on percussion, and here and there some purer reexpiration. Following these, we have sometimes speedily established, some abnormal sable at the base of the lungs, and becomes more diffused throughout the whole extent of the organ, both
in front and posteriorly. If there be any old and softened tubercle even to a very limited extent, at the after, giving rise to coarse crepitation, the disease cannot be mistaken; but on the contrary, if the progress be more rapid and acute, none of these will be present at first, but dyspnoea, gradually becoming worse, and accompanying the symptom of Bronchitis, with the signs indicated above, will be most marked. We can say with Sir J. Clarke, that the persistence of these symptoms, however few, nevertheless of the usual Remedies, and the absence of any other of the signs which generally accompany the ordinary Acute Maladies of the Chest, form the ground work of our diagnosis in Acute Phthisis.

The typical and Bronchitic Symptom may lead it to be Confounded with Typhus fever and Bronchitis.

The Typhus Condition is nothing more than we encounter in many inflammatory Complaints as in Pneumonia. But although we meet with high fever, suffusion blindness
Traité de Médiatique. t. 4 p. 533.
often skin, headache, and delirium, we do not find any symptoms or marked abdominal tenderness, and above all never any symptom like typhus petechiae.

With regard to chronicitis, the diagnosis is easier. When we observe the patient at the first, we see the anxiety dyspnea well marked, before ever we have examined the chest, and when we find any abnormal rales, they seem quite insufficient to explain the local and general embarrassment. But the expectoration is sometimes analogous. But the general condition of the patient is not in keeping with it. These general phenomena show us that mere auscultation may lead us into error; thus we must by comparison arrive at a correction of isolated symptoms. When the disease has attained a more advanced period, percussion will lead us to suspect a morbid deposit, and we will find dullness in some places. Perry remarks, however, that when the tubercles are in the Crude Condition, and separated by healthy tissue, the sensation of resistance perceived by the finger...
during percussion, unless evident then when the tubercle is in the ordinary masses, and there is scarcely any obscurity of sound.

Acute Phthisis can scarcely be confounded with Pneumonia, but when the inflammatory action is set up simultaneously with tubercle, it becomes difficult to say what part each plays in the individual. Once this occurred in our experience and the disease was set down as Pneumonia but only the superior lobe of the lung was affected with the disease. No symptoms appear to us to suffice to distinguish the two affections in similar cases. Another case presented itself, still more difficult viz where the pneumonia was limited to the parenchyma immediately surrounding the tubercle in irregular patches.

Meningitis may be mistaken for this disease, but the differential signs are sufficiently well marked at an early stage of both complaints.

To resume - The diagnosis of Acute Phthisis may with great care be made
out, for in no case does it present the character of Bronchitis, Pneumonia or Typhoid fever.
Nevertheless when the disease does not terminate in death, and when the affection exists
but in an exacerbation of latent Phthisis, or a fresh deposit, the disease may be readily mistaken.

Prognosis.

Acute Phthisis is an affection of the gravest description and generally fatal, when it has attained a certain stage. But it is not always so, and we believe it is susceptible of cure, of a certain description, that is, the chances of declining into Chronic Phthisis, and as this latter affection, in certain favorable circumstances, is now believed capable of cure, the prognosis is not always unfavorable. It cannot be demonstrated in a satisfactory manner that acute does occur in Chronic Phthisis, but it appears to us, in the highest probability. In a discussion
within
L'Union Médicale 17 Juin 1837.
in the Academy of Medicine of Paris, it is reported that Enriecbier is of opinion that in general, the first outbreak of irritation is that which destroys the patient; and the results of post-mortem examinations in every hospital prove how often large quantities of tubercular deposits are found in the lung without having had any part in causing death. The examination of the local symptoms may furnish us with some grounds of prognosis. Thus, in all cases, where we have intense dyspnoea, sibilant, resonant or crepitant rales, the disease was rapidly fatal. These rales, which existed for many days limited to a confined space in the thorax have sometimes increased and spread over the whole extent of the lung, in the course of a few additional days; and if typhoid symptoms present themselves, the greatest reserve should be exercised in the prognosis, without, however, entirely abandoning all hope.

In those cases where signs of the different stages of tubercularisation exist, as softening of the lung doubt may be entertained.
Consultation and percussion, the general condition of the patient, and above all the association of symptoms, enable us to pronounce the probable termination, as well as conjecture its period.

But it is only problematical, for we constantly see pathological patients sinking with very variable extents of lesion, some having so little as lead us to doubt it is being the cause of death, and others with as much as to cause us to wonder on the other hand, how life could have been so long sustained.

The complications of acute phthisis will always influence the prognosis, and it is believed that pneumonia, of any notable extent is the most formidable of these complications.

The existence of this morbid product in other organs is always a very grave circumstance.
Causes.

The consideration of this part of our subject is common to Acute, Chronic, Tuberculosis, and it will suffice to take but a hurried glance of those circumstances which are ranked among the Causes of both.

1. Influence of Age.
According to Louis, we must consider it as demonstrated that youth favors, in a remarkable degree, the deposition of tubercle, as well as accelerate its progress. Thus prior to 30 years of age Tuberculosis runs its course much more rapidly than after that age. Analyzing many reports from various sources we find the average to be about 30 years of age when first fairly the subject of Consumption. Out of 27, 21 were below and 6 were above 30 years. The extremes being 12 and 76 years. The oldest of our own patients was 42 years. Such are the results of comparison of the subjects also were
Journal de Progrès t II. 1830.

Nîée Paris 1835.
were labouring under symptoms of tubercle, but we believe the results would be materially altered, were we to consider the fact that so many children are found affected with latent tubercle. M. Papazovine found tubercle in three-fifths of the children who died under his inspection, and again out of 194 autopsies of infants made by Hazel in 1835, at the Hôpital des Enfants, 66 had tubercle in their lungs.

2. Sept.

The male sex seems to be more frequently subject to Acute Phthisis than the female, thus out of 23 cases, taken at random, 14 were males, and 9 females. This is the reverse of what is found to take place in Chronic Phthisis, for about 3 in 5 of the subjects of this affection are females. If acute always precedes Chronic Phthisis, it would be difficult to reconcile these facts. The strong masculine constitution remarks Sir, "seems to favour the rapid progress of Phthisis", and it is matter of daily observation that
Graves Ann. med. vol. 10.

Principles of Path. 1872.
that females and weakly males, seem to stand out longest against the ravages of the affection.

3. Is it hereditary?

Some seem inclined to deny an important place to hereditary influence, while others of the most extensive observation have always assigned this as a frequent cause. The former class say that upon most rigid enquiries, the existence of this disease fails to be discovered in the near relatives of the patient. But we conceive that such failures does not militate against the question, for the a father or a mother may not have fallen victims to the same affection, they may have been in the condition to impart all that is essential to the diathesis to their progeny. Children of the tenderest age have had tubercle in their lungs, and Billards has detected tubercle in the lung of the fetus in utero. Professor Aliceon, in writing on the Scrofulous Condition remarks: 'The tendency is decidedly hereditary, i.e., those whose progenitors have shown marks of Scrofulous disease, become affected.'
affected in this way in much larger proportions, although it is very seldom that tuberculosis or any other scrofulous affection are congenital. Peculiarities of habits in parents, even independent of actual disease in them, appears evidently to dispose to scrofula in their offspring.

In our own cases, we learned with a sufficient degree of certainty that 3 of the 5 had near relatives who had died of some affections of the lung of long standing.

But while the influence of hereditary predisposition is thus insisted on, it cannot be denied that Phthisis, or at least the anthrax, predisposing to it, may be, and often is, engendered, and that at a very early age; and perhaps it is too much the fashion to say that Phthisis is a hereditary disease, and to overlook the fact that the purest blood may become contaminated by tuberculosis. With regard to the human race, it may be difficult to establish this with mathematical rigor, seeing we are not in a position to say how far the blood of any individual
Oot II p. 94.

individual is pure before being exposed to the debilitating influences; but more precise conclusions have been arrived at with regard to the lower animals. It is facetiously remarked by Graves, "that if a tiger from the wilds of Africa, who can boast of a line of ancestors as free from Phthisis as any of us, be brought into this country, and debilitated and otherwise changed by climate and impure air, and a climate to which he is unaccustomed, you will frequently find he will die Phthisical. Negroes, whose progenitors laboured under no form of Phthisis, will yet Consumption in Great Britain."

Professor Bennett, seems to lay little if any stress upon hereditary tendencies, in this affection, and generalizing upon the Causeation of Phthisis, he sums up by the following, "From a study of the symptoms, Causes, morbid anatomy, histology of Pulmonary Phthisis, we are led to the Conclusion that it is a Disease of primary digestion, Causing, 1. Impoverishment of the Blood,
Local suppuration into the lungs, which presents the character of intercurrent suppuration and leaving to the successive formation and softening of these, and the ulceration which follows in the pulmonary and other tissues, the destructive results which distinguish it. "Improvement of blood through arrangement of primary digestion," may be made to include all these influences, outward in their character, which have been brought to bear upon the individual from the first moment of its existence, even in utero, in which case, consequently, the system may have been built up of deceased materials from its very foundation, and this, we believe, would be making out a case of hereditary influence; or, after being cut off from maternal supplies, the same consequences may arise from adverse circumstances in which the individual is placed. Thus, cold, impure, damp air, insufficient clothing, inadequate food and drinks, are commonly cited as the procuring causes of the phthisical disposition. And it is to be remarked that the mere succession of partaking of...
of what may in themselves be unfavourable articles of diet, are no guarantee against the effects of insufficient aliment, for it is notorious that even in the better ranks of life, such indiscretion and irregularities are witnessed in regard to the feeding of the young, that they might as well be fed with the poorest of the land.

Laurence accords a great influence to the depressing passions, and the same may be said of all causes which tend to exhaust the nervous energies of the frame, such as prevalent excesses of...

In none of the cases which we have reported, could we discover anything peculiar in the mode of life, or of the habits to which they were exposed, and the same may be said of the moral emotions...

Interrogation is said to exercise an influence on the progress of the disease when once begun, which in itself is insufficiently peculiar, but it cannot be ranked among the causes.
Histoire des Alliées, Chron.
t. III. p. 393.
The existence of previous diseases, either general or local, must exercise a marked influence in favouring the induction of tuberculosis. And, accordingly to the view we have ventured to take of the origin in the majority of cases, of tubercle, we must name those affections which are often inflammatory characters, and which have their seat in the thorax. Thus Pneumonia and Pleuritis must be regarded as predisposing to Tuberculosis, Chronic or Acute; and Broussais remarks that these are two of the most important. Andral, also, admitting the important part played by these in producing Tuberculosis, asserts (what we have never lost sight of) viz., the persistence of a particular diathesis by which the inflammatory process is modified. Attacks of Inflammation may also act in debilitating the constitution and thus act detrimentally irrespective of any product of a morbid type.

Under this head we may refer to the influence of certain matters inhaled, such as irritating dust of any kind or gases of an injurious
injurions nature, and the effects of these are acknowledged on all sides, in reference to such tradesmen as are exposed to those continual influence, as Needle-grinders, Masons &c. Syphilis, and especially the old plan of its treatment, must have had considerable effect in debilitatiing the Constitution, and so exposing the individual to the full effects of any other influence that might be brought to bear upon him, but further than this it might be fairly doubted whether any special tendency was given.

In one of our Cases (No. 2) we found the patient had been the subject of one of the hyperaemorrhagic fevers, and from its severe sequel, viz. Anaemia Alburnina, must have rendered her subject to the invades of acute diseases. Another of them (No. 4) had typhus, prior to her symptoms of Acute Plutritis, and we know well that nothing is more common than inflammatory complication of the lungs in this fever.

The remainder of our subjects never had any previous disease of a grave kind.
and the most of them never had any suitable departure from health, until they gave evidence of their being the subjects of that which proved fatal.

To resume in a word, the influence of anterior disease of a formidable kind is not remarkable, and the affection is principally caused by a morbidous disease either inherited or acquired, which gives rise to a morbid matter in the lungs by reason of some local irritation or congestion.

Treatment

Unhappily in this division of our subject, we need be but short for as yet, it appears, that nearly all the cases which have come under the notice of several observers have only come to an unhappy termination, and of such cases as have been
more fortunate, it may be truly said, it was
due more to the salutary efforts of mysterious
and unexplained nature, than the results of
medical appliances. Nevertheless of this, we
ought not to be discouraged, but say with
Rayle in referring to Changeableness of the
list of incurable diseases, "When even a de-
crease in incurable, the physician will at least
merit public gratitude, who acquires an exact
knowledge of the malady, and indicates its progress
with precision, and who may be thus able to
prolong the life and alleviate the sufferings
of the patient, as much as the nature of the
disease will admit."

Dr. Waller advises, as the most
rational treatment, small bleedings, Cautious-
ly made, and especially where there are symp-
toms of Congestion of the Pulmonary tissue,
brain, or even Pneumonia itself. According
to the same authority, also, the Acetate of
Lead (which is so much esteemed in Germany
in the treatment of Pneumonia), is sometimes
indicated. He also gives Quinine, upon
the appearance of febrile symptoms; the
potassium-tartrate of Antimony in acute doses, and lastly, opium to check the Cough.

Full of London employed the stimulat- ing plan, but confesses, with no satisfactory results. We now prefer the antiphlogistic method applied with Caution.

In those Cases which we have reported the tonic plan was pursued, and remedies such as doses of Cinchona, Vinous Lemonade, Bor-

Aqua, were given; and in some cases revulsive measures, such as Antimony Plisters between the Shoulders, on the thighs, Vithroap were tried, but they were productive only of slight alleviation.

We see then, that the the treatment of Chronic Phthisis, is of doubtful efficacy, it has the advantage of administering to the relief of the symptoms, and the case of the patient, while in acute Phthisis, we cannot even, as yet, obtain any marked palliative effects.

This doubtless to the prevention of the attacks, that all our efforts should be directed, and if possible to arrest the disease in the germs. This must at all times be-
a difficult matter, seeing we know not under what exact circumstances this deposit will take place; and that we did know this, we are utterly ignorant of any thing, that could change the Physical disposition. Our attention is therefore confined to those circumstances of a general nature, under which we find tubercle developed, which circumstances have been referred to under the head of occasion.
Cases

illustrative of the preceding

remarks.
Case No. 1.

S. S., aged 42, a Cabdriver, admitted into Hospital with Pulmonary Pulmarah.io, on the 22nd May 1857.

Circulatory System. Heart's sounds normal. Pulse 76, weak and small. Cardiac dullness less than normal, apparently from expansion of lung over the region, respiration being heard there.

Respiratory System. Constitution of chest, good. Difficulty of breathing deeply, and general dyspnoe. Voice slightly hoarse and weakened. Some dry hacking cough, without any Phthism. On percussion in front, no dulness could be detected, and on auscultation, the respiration, over infraclavicular regions, remained prolonged. Breathing is bronchial, with musical rales, and on the right side at the summit posteriorly, the same are heard. The vocal resonance on this side towards the summit is also increased. Respiratory movement generally, both in expiration and in inspiration, is rude and short. Posteriorly, the
lower part of the chest appeared a little increased in tumour.

**Nervous System.** General intelligence, good; no tinnitus aurium, or noise in ears: complains of slight headaches and dejection, but otherwise this system is normal.

**Digestive System.** Tongue, slightly furred. Complete loss of appetite, and loathing felt when food is presented. Does not complain of any particular weakness in the epigastrum. Bowels open, but some diarrhoea for about 10 days which has diminished gradually.

**Genito-Urinary System.** Normal.

**Integumentary System.** Hair of natural heat, and perspiration natural. A general diffuse redness was apparent on the surface.

**Antecedent History.** Until the year 1853 the patient enjoyed uninterrupted good health. He has frequently had colds during winter, but never ever...
oblige to leave off working on account of them.
He declares he never knew himself to have felt blood
nor experienced any acute pain in the thorax, nor
ever had remarkable night sweats. He does not
think himself thinner now than previously, nor
known himself becoming weaker. As a Calvinist
he is frequently exposed to the influence of the
weathet. His nourishment, he declares, to have
been sufficient, and having some occasional
excesses in alcoholic drinks, his life has been
pretty regular. His place of residence has been
for years past, well aired, and upon the second
floor. He cannot tell that his liver has been
affected, or that he has ever suffered from
symptoms of Pulmonary consumption, or Cough,
emaciation, and prolonged illness. About two
months ago, he was cold for about 3 weeks,
but had no great Cough or marked Afebrities.
During 1851 he was constantly employed, without
observing any change in his health. In March
1852, he obtained an injury in the foot, by a
heavy body falling upon it, with which he was
confined in hospital for about 3 weeks. Towards
the end of March, and beginning of April, he
observed
observed himself becoming weak, and began to cough altho' in Feb'y, he had not felt so vigorous as usual, he had, then, no pain between the shoulders, nor any nocturnal sweatings. On the 12th, they without any known cause, he felt very unwell, experienced loss of appetite, pain in epigastrium, and was under the necessity of keeping bed. Upon being admitted to Hospital on the 23d May, the various symptoms were found as detailed under the various systems.

Progress & Treatment.
May 23: Ordered Beef tea & Sweetened Grape water.
26. Despares. Since this morning, a slight wandering Apraxia, Continued somnolence, and threatening coma. Respects to questions indistinctly, as if he had a difficulty of articulation. Respiration, 18 & noisily, Pulse 84, regular, full and strong. Cough continues but now accompanied by a more abundant expectorition, which is nearly all black sanguineous matter. and has some streaks of blood. Has had two liquid stools a day.
27. Somnolence continues. Colour of skin heightened without, however, any eruption. Complete anorexia and continued diarrhoea. Same heat continued.

28. Delirium during the night, towards the morning responded with difficulty to questions, but does not express any complaint; the face is red, and has an expression of stupor. Pulse 80, strong and regular. Respirations fall to 30. Noisy, Aurousia, great thirst. Tongue dry and cracked; abdomen a little tympanitic, but without any increased sensiveness.

Diarrhoea continues, urine less abundant and high coloured. Vomiting continues in the same depressed condition, and general state much the same, except the pulse, which is 104. and long, more frequent. On percussion, the dullness is more marked posteriorly on the right, and slight bronchophony is heard in the same region. Here the respiratory murmur is little heard, and no abnormal rales. The dullness which does not change by change of position, is marked to the level of the inferior angle of the Scapula. Tongue dry. Diarrhoea still continues. To have 2 starch injections.
24. In the same condition ordered. Wine of Cinchona, and to continue Beef tea.

25. Delirium almost constant, but more during the night than the day. Brawny continues. Pulse 112. Still retaining strength. Skin hot but covered with slight perspiration. Respiration 30-40. Cough frequent with mucus监督, without any blood, and serous. On percussion the dullness is marked on the upper 3/4 of the right lung, and bibilant rales are heard over the upper part of both lungs. Same heat went continued. Vomiting. Delirium becomes more violent. Respiration quickened to 52.

Pulse 108. In inferior third of right lung crepitation rales now heard. Sinusfluence to be applied to inferior extremities.


2. All the symptoms aggravated, eyes are hollow, lips and cheeks have a violet tinge.
Pulse 112. Resp. 52. Delirium Calm, skin hot, and involuntary passage of urine 16.
3 died at 8 of the this morning.

Section Cadaveris.

Examination 24 hours after death, No Putrefaction, rigor mortis moderate, little emaciation.

Head. Congestion of Mediator, and Considerably quantity of effusion into subarachnoid space. Substance of Brain a little congested, but no trace of tubercle in either it or the meninges.

Lungs. Considerable adhesion, in both lungs posteriorly towards the bones, and equally so at the apices, especially the right one. Both lungs were adhemorrhagic, were not at all Collapsed, but firm and resistant, especially towards the posterior aspect. In front they allowed of being easily Collapsed, and a number of little hard granules of tubercle were felt within substance, and many little greyish masses could be seen projecting thru the pleura Pulmonalis, and giving an milky aspect to the
the lung. The apex of the right lung was hard, and contained two masses of the size of a pea enclosed in fibrous envelopes, and consisted of softened tubercle. The substance of both lungs contained a large quantity of miliary tubercle, more abundant at the apices than the bases. Posteriorly the inferior lobe of right lung was dense and friable, brownish red in colour, and studded with miliary tubercles, and afforded much red liquid on pressure, which little aerated. It did not swin in water, as the other portions did.

Larynx. A small polypus was found attached to the right inferior Condo vocalis. No ulceration. Bronchi, healthy, containing normal mucus. Heart, healthy. Stomach & healthy. Liver, Spleen, & Kidneys, normal.
Case No. 2.

G. L., aged 30 years, by trade a dyer. Female. Admitted 13th April 1852, with symptoms of acute Pulmonary affection.

Circulatory System. Pulse 104, of middling strength. An endocardial murmur with the first sound in the vicinity of sigmoid valves, and propagated along Corvode.

Respiratory System. Complains of shooting pain between the shoulders for 10 days, without any uneasiness in the anterior part of the thorax. The Respiration is laboured and frequent. Cough comes on in frequent paroxysms, with sputum. The chest shows no marked dulness on percussion; but on the contrary, more resonant than usual. Throughout the whole extent of both lungs, dry sibilant resonant notes are heard, both during inspiration and expiration, and towards the sides, these are mixed with course crackling sounds. There are no moist rales to be heard in any part. The Respiratory murmur is heard throughout.
throughout the whole abdominal region, the tissue is well formed, and no flatness can be seen in the infra-clavicular regions.

**Nervous System.**

Excepting some headache & prostration of strength this system is healthy.

**Digestive System.**

Tongue a little furred towards the edges. Complete loss of appetite, no diarrhoea or vomiting at present.

**Genito-Urinary System.**

At present, nursing, and has no Catamenial discharge. Urine in normal quantity but highly disagreeable by heat and nitric acid. Never contained blood, nor ever had pain in the renal regions.

**Integumentary System.**

Skin rather dry that, face flushed and the lips pale. Lower extremities are edematous, especially the feet and inner aspect of thighs. The skin of the back breast is covered with numerous light brown spots which do not disappear under pressure of the finger. The right mamma is the seat of a superficial abscess.
Antecedent History. The patient declares herself to have enjoyed general good health until the present illness. Has never been subject to colds, nor ever had any throat affection, has always been regular in the Catarrh, which began at 15½ years of age. Has never been shorter than at present, nor has she ever spit blood, but sometimes had bleeding from nose. She never had uterine bleeding nor pain until now. Parentage apparently free of any tuberculous affection. Some months, she was confined and had a healthy delivery, and was speedily enabled to resume her employment and suckle her child. Three weeks after confinement, she was attacked a feverishness, which in 3 or 4 days ended in an eruption, this was attended with pain in the chest, and difficulty of defluxion. These confined her to bed for about 12 days, and then she was able to get up, but her Convalescence was never complete. Difficulty of breathing began, and she felt also, a feeling of constipation in the
in the epigastric region, a little cough with serous sputum, but no blood was mixed with it. Some days before entry, the patient perceived her feet becoming edematous, principally at night, but never experienced any lumber aæmnesia, nor did the urine ever contain any blood. Her appetite began to fail, but there was no vomiting or diarrhea. When she entered the Hospital, her condition was detailed formerly.

Progress & Treatment.

April 14. Ordered Kefir tea, and sweetened infusion of Rhei Æpens, for a drink, Lemma. 16. Considerable dyspnea, requiring to retain the sitting posture, almost constantly, Pulse 98 weak, Respiration 14. Sibilant rales still heard over the whole extent of lungs, and the thorax is sonorous, except the spines, both in front and behind. Vocal resonance increased, no perceptible increased thoracic vibrations. The albumina has gradually diminished since admission, and the albuminuria has entirely but gradually disappeared.
18. The symptoms above burst spontaneously today.

21. Dyspnea gradually becomes more harassing. Resp. as high as 48 in an minute. Pulse 120, small, compressible. Face pale and anxious. Fits of cyanosis more frequent. Nutrition, pure worms slightly obscured. Experience a sensation of constriction across the epigastric fossa. Resonance of chest in the lower 1/4, clear, marked, and stertorous. Accompanied with occasional mucous rales, are heard during inspiration. Bruit de coagiment with some subcrepitant rales heard at ápices, with some dullness in the same region. Bronchophony in a slight degree, at base. Sleep interrupted by the frequent cough. Cyanosis increases rapidly and nightly collociation occurs. The acetous pain is felt between the shoulders today. Anosmia, the tongue is dry, and redness. Ordered. 1/6th to be placed between the shoulders.

22. During last night was much embarrassed by being obliged to keep one position, on account of the chest outback. Not so anxious looking in the face. Urine light, Blurred and coaguable. Pulse 132 small. Resp. 52.

26. Cyanosis and sinking increase each day.

Resp. 138-50, with troublesome cough and dyspnea.

Subscribed.
Subcutaneous oedema, spreading rapidly in extent on both sides, and beard distinctly into arm pits. It has a blister placed on sternum.

1.3 May, very feeble today and obliged to sit up constantly. Resp. 38. Pulse 130-140. Small vesicle.
The signs from anæsthesia, so far as it can be practised, are the same. Intelligence remains intact. Great thirst and tongue dry. Blister to be placed on right aspect of the thorax.


5. Died at 10:30, this morning.

Sectio Cadaveris.


Head. no trace of tubercle. Brain substance slightly rose-coloured.

Thorax. no adhesions or effusion, pleura pulmonales somewhat congested. The anterior border of each lung, emphysematous. Colour externally normal but
but on minute examination of pleura, it was found
thickly studded with villous tubercles, elevated to a
small degree above the general surface. At the apex
of each lung were found many crotaceous boucrons
surrounded by condensed tortuous meshes of parenchyma, of
a greyish hue, like the palatizations. On section,
both lungs, from apex to base, were thickly set
with grey villous granulations, and some towards
the apex, were larger, harder and opaque in the
centre, but surrounded with perfectly healthy
tissue. The Bronchii contained some mucous-fluid
matter, and their walls were of a reddish horn
hue, with some little red vegetations, strewn here
and there. All the other viscera were
healthy.

Case No. 3.

J. J. aged 28 years, occupied as a female servant.
Admitted 28th April.

Circulatory System. Heart, apparently healthy. Pulse
108-112
Respiratory System.

Does not complain of much oppression or breathing. The Respiration is 35 to the minute. No cough, but a general feeling of lassitude (futility). On percussion, we find fullness over the right side posteriorly from about two inches below the spine of the scapula, to the base of the lung. The left is normal. By Auscultation, on the left, sonorous rales to the extent of lung, and on the right, the same as heard in the superior third, and where we find fullness in the lung, respirations are not heard, but there is a marked increase of vocal resonance. In front, some scattered vibratory rales. Cough by paroxysm without any expector.

Nervous System. Healthy.

Digestive System. Anorexia complete. Tongue white and clammy. no diarrhea, natural stool yesterday.

Integumentary System

Skin cool, and sometimes cold in the extremities, which the patient complains of being difficult to keep warm. No xerostomia. Face, especially the lips, are violet-tinted.

Antecedent History.

Until a month previous to admission into Hospital was thought quite healthy, but about that time she caught cold, which was followed by cough in paroxysms, headache, general uneasiness, inclination to bend forward constantly, loss of appetite and great thirst. At the same time vomiting, but she remarked the discharge was less in quantity and of a pale color than ordinary. Nevertheless, she continued discharging her duties until 6 days ago, when she was seized with violent urging and was obliged to keep bed until she was sent to Hospital in the condition described.

Progress and Treatment.

28. April. Ordered a blister, to posterior right side of thighs, and Simpson's to the calves of the leg. Small dose of Antimony and Beeswax.

29. Face, arms, hand and superior part of chest are violet colored. Respiration 36. Pulse 120 and
and so weak as scarcely to be counted. Does not suffer much from dyspepsia. Ordered Seipium to consist of alcohol.

30. Symptoms of asphyxia greatly increased; the mouth is constantly open, and there marked cyanosis in the countenance. Cannot respond to questions. Noticed to be much agitated during the night.

May 1. Died without any change of symptoms and no delirium.

Sectio Cadaveris.

Cyanosis over the superior part of trunk, extremities little cyanosed.

Left lung had no adhesions. Right lung adherent at base, but adherences the thick, were soft and friable. The right pleural cavity contained a little serum. Throughout the whole extent of both lungs, we found a considerable number of transparent miliary granulations, some of which had a yellowish hue, but none were soft or cuticular. The part of the lung was lobulated. The lining membrane of the larger bronchi, was somewhat redder than natural, but it did not extend.
attend to the first division, which were filled with aropy mucus.

Saying that the spleen was somewhat enlarged, and softer in texture than usual, the remaining viscera were healthy.

(Communicated by Dr. Mackintosh. Stewarts' Hospital)

Case No. 14.

Ms. aged 24 years. Occupation Needlewoman. Admitted 6 June 1852.


Respiratory System. No marked dyspnoea, but the respiration is accelerated. Has a short cough with no expectoration. No pleuritic or thoracic pain. No dulness could be detected, thoracic thrill natural. Auscultation shows roughness of Respiration over the whole chest, and expiration is a
is a little prolonged and rough towards the apex of right lung and even somewhat bronchitic, with increased vocal resonance. Towards the base of each lung there is some vibration, and murmur, which latter disappear after coughing. The chest is well formed.

**Nervous System.**

Normal, with the exception of dullness when sitting up; intelligence, good, but an expression of anxiety creeps on the face, which is pale.

**Digestive System.**

Normal.

**Genito-Urinary System.**

Healthy.

**Antecedent History.**

Previous to this attack which commenced about a month ago, she had enjoyed good health, excepting having had typhoid fever, but she states that she perfectly recovered from it. For an entire year after she was strong, and even became corpulent; and suffered no disarrangement either in digestive nor uterine functions. About a month ago, without being able to assign any cause
She felt herself becoming unwell, and feeble, but did not quit work during the two following weeks. Has been obliged to keep bed during the last 11 days, and suffered from a marked diminution of muscular strength, bad headache, and was giddy on attempting to walk. There was no vomiting, diarrhoea nor dysenteric. The bowels became loose passing 4 or 5 liquid stools daily without pain. They have now settled to two moderate evacuation daily. Does not complain of any thoracic oppression. Has slight rigor occasionally, but were not followed by any remarkable reaction nor any sweats. During the last fortnight she has taken nothing but Beef tea.

Progress and Treatment.

6. June. During the evening vomited some greenish bilious matter. Has had one liquid stool. Experiences much depression, and a feeling of hollowness and weakness about the chest. The headache is troublesome. Ordered

Dry mel.

In Auscultation Respiration rapid, and accompanied at the base of both lungs, with roncous sounds and slight vibration. Vocal resonance more marked at the apex of both lungs.

9-14 Depression continued. Feasting at all kinds of food, three vomiting occasionally. Auscultatory signs nearly the same, only the roncous noises are greater, and more extended reaching over the side and front of chest. The thorax is less aurous, and the vocal resonance increases in proportion. 

Benedictine, ordered. Euphemia of Honey of Mercury, which procured two liquid stools in the course of the evening.

15. About 3 of K this afternoon, the patient, without any premonitory symptoms was attacked with a suffocating feeling, as if some heavy load lay upon the thorax. The face became blue, laboured Calm, this lasted for a few minutes. At 2 1/2 of K the was in the usual condition for deep rest, pulse 96 feeble scarcely to be felt at times. At ten o'clock a fresh attack of the apoplexy came on, which lasting about 10 mins, ended in a deep sigh death.
Sectio Cadaveris.

Marked congestion, and a little discoloration of integuments over the abdomen.
Head—no trace of tubercle.
Thorax—no pleuritic effusion. Short, tough old adhesions at the summit of the right lung. The interior of lung is marked bluish, faint in front, but of dark colour at the posterior aspect, and studded all over with a number of little hard bodies easily perceived by the finger. At the apex of the right lung there is a small cavity of the size of a pea, containing softened tuberulous matter, and the parenchyma which surrounds it is firm and grey. The whole substance of both lungs is pervaded by milky tubercles, varying in size from a barley-sprickle to that of a pin-head. In the right lung these were larger and firmer than in the left, and more abundant the apex than towards the base. The parenchymatous structure surrounding them was soft, encrustating & non-friable, and was engorged towards the base & posteriorly, with
a red serosity, aerated, when expelled from the section by pressure.

The kidneys were of ordinary volume. On the surface brown spots were seen, and in section, both the tubular and cortical subtlety were studded with yellowish granules of the size of paper's head. Which upon microscopic examination exhibited the characters of tubercle. Each granule contained from 18 to 20 of them, but the lining membrane of the Calyces was healthy.

The uterus, was normal, but there was a small unicocular cystic tumor upon one ovary. The remaining ovaries were healthy.

Case No. 5.

G. L. aged 34, Wine merchant.
Admitted into Hospital 21st July, with Perilisus.

Circulatory System.

Heart's sounds were normal.
Pulse from 78 to 80. Equinivalent strength.

Respiratory System. In auscultation the thoracic we
find the following results. Slight dulness on
fissuress at the apex of the left lung within
infraclavicular region, nothing remarkable in
the right lung. On the left side, aspiration is
prolonged, with some dry rales, especially during
forced breathing, and increase of vocal resonance.
Does not complain of any dyspnea, nor has he
any pain.


Digestive System. Anorexie and diarrhea, tongue
clean. We no complaint in the epigastrie region.


Integumentary System. Normal, excepting occasional
slight diaphoresis.

Antecedent History. Has complained for two months,
but enjoyed uninterrupted good health till then.
His first complaint was a slight cold which brought on a cough, principally in the morning and evening, but no symptoms of any importance. He was able to continue his occupation until about six days ago, when febrile symptoms manifested themselves, and he was forced to quit work. He was advised to rub Croton oil on the chest, and experienced some relief from doing, but his feebleness increased, and his cough returned in a few days. The diarrhea, with nocturnal sweats, and fever supervened.

Progress and Treatment.

2-6 July. Cough less troublesome during last night, than for many nights previously.
Ordered, Pink: Weiss, Opialt, and a starch and opium enema. To have a Jeton placed in the left infralavicular region. Diluents.
8: was sleepless and much agitated during the night. Copious sweatings, and troublesome cough, but no chills. Cheeks very high colored. Conception becoming marked. Throughout the whole extent of the left lung, anteriorly, there
107
is comparative dulness, and there are 3 or 4 sibilent rales towards the apex. In the right lung the respiration is feeble.
12. Cough increasing, and fatiguing, but no expectoration. In the right lung bronchial respiration, in the left towards the apex. Moist rales very distinct.
14. A slight reddish expectoration, now accompanies the cough. Rhythm for the most part viscous fluid like mucilage. Vomited sweat very abundant, and a diarrhoea has set in, last night had an involuntary stool. Some delirium during the night. Skin dry and hot. Moist rales very distinct. More diffused accompanied by the same dry touch on the middle of the left lung.
18. Expectoration stopped since last report. Delirium continues during the night, now suffering from considerable depression.
19. Pulse so frequently as not to be counted.
Agitation.....
Agitation and delirium constant. No acute physical symptoms present.

Died delirious during the night.

Sectio Cadaveris.

Emaciation, considerable, very strong and close adhesions were found between the pleura of the left lung, and between the base of the same lung, and upper surface of the diaphragm. Adhesions also on right side, but much less, and confined to the posterior aspect of the lung. At the apex of the left lung found a small cavity, about an inch in diameter, containing thick yellow purulent matter. The walls of this cavity were lined by a white, false membrane, soft and very easily removed. The section of this lung showed it thinly interspersed with villous tubercles, and there were Bunte whitish small cavities, each large enough to contain a small hazel nut. Towards the base, the pleura lay. The lung was red, and contained an abundant purgative serosity.
The right lung had also at the base a very small cavity, and containing also purulent matter. The superior lobe was crammed with milky granules but no trace of softening. The remainder of the lung was slightly affected. Liver: Somewhat advanced in fatty degeneration, and slightly increased in volume.

Heart: Muscular tissue placed, containing large white clots in the left ventricle.

Kidneys, slightly enlarged. Congested. Spleen, engorged, and softened.

Intestinal Canal: Contained abundant gaseous matter, but no trace of tubercles.
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