SOME OBSERVATIONS
ON A
SPECIES
OF
PULMONARY CONSUMPTION,
VERY FREQUENT IN GREAT BRITAIN.

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Read June 25, 1816.

TO many physicians there will probably be nothing new in the following observations; but this remark I believe will not apply to the greater number of medical men, because it is very common for the different species of pulmonary consumption to be regarded as the same disease, and treated in the same way; nor is it probable that the species which I am about to consider will be generally distinguished till some separate treatise, which, as far as I know, has not yet appeared, calls the attention of the public to it; yet it will be evident, I think, from

the following observations, that its nature is very different from that of other species of the disease ; and that while, under the common treatment, it is nearly as fatal as these species, under that which is suited to it, its progress may generally in the earlier, and sometimes even in the more advanced stages, be arrested.

I shall, in the first place, point out the symptoms by which this species of pulmonary consumption is distinguished ; then make some observations on its causes, and point out the analogy which exists between it and many diseases apparently altogether of a different nature ; and in the last place, I shall detail the plan of treatment, which I have found most successful in it.

Of the Symptoms.

I had occasion, twelve years ago, to mention this species of consumption and the plan of treatment adapted to it, in the second edition of my treatise on Febrile Diseases. Since that time it has particularly attracted my attention. It cannot therefore, I think, fail to be of some use to those whose attention has also been directed to it, to see the observations I have been led to make in so many years' pretty extensive experience of it ; for there are few diseases so frequent in the part of England in which I reside, and indeed, I believe, in most parts of Great Britain. To those whose attention

has not yet been particularly directed to it, any observations on the subject must be useful.

It is not my intention to give a detailed account of the symptoms of this species of phthisis. I shall only mention the symptoms and modifications of symptoms by which it is distinguished. Contrary to what is usual in other species of the disease, the spirits from the beginning are generally more or less depressed, and the countenance is more sallow than usual. The cough at first is generally dry, or the patient brings up a little mucus after a severe, and often long continued fit of coughing, which seems to be rather the effect of the irritation of coughing than any thing which had previously existed in the lungs; for the cough in this species of consumption, particularly in its early stages, frequently comes in violent fits, in the intervals of which the patient is often but little troubled with it. These fits are particularly apt to occur after he has eaten, especially if he has eaten a great deal, or any thing by which the digestion is disturbed; and on lying down. In many instances they are most apt to come on when he lies on the left side, sometimes when he lies on the right. I think in almost all cases, they are least apt to occur in the recumbent position, when the patient lies on the back with the shoulders a little raised; and it often happens in the more advanced stages, long before the strength is much exhausted, that this is the only position in which he can lie without inconve-

nience. As in all other forms of phthisis, so in this it is common for the cough to be troublesome for some time after awaking in the morning.

As the disease proceeds, the cough becomes more frequent, returns less decidedly by fits, and is attended with a more copious expectoration. In all these respects there is of course considerable variety in different cases, but in almost all the general character here pointed out may be observed. The matter expectorated is at first limpid and glairy; by degrees we see intermixed with it small portions of an opaque pus-like substance, the proportion of which in the progress of the disease increases; and in some cases the quantity expectorated is astonishing, often much greater in proportion to the severity of the other symptoms, than in other species of phthisis. I have often seen half a pint or more of pus-like matter mixed with tough phlegm expectorated daily, when the other symptoms were comparatively mild. In other species of phthisis, very copious and long continued expectoration of pus-like matter is less common. In them such copious expectoration generally arises from the bursting of a vomica. The matter it contained, if not sufficient to occasion suffocation, being brought up, the quantity expectorated is again reduced till another vomica bursts.

Bloody expectoration is by no means uncommon in this species of phthisis. Blood often appears

early in the disease mixed with the colourless phlegm. After the pus-like expectoration commences, if blood has not previously appeared, it is much less apt to appear than in other forms of the disease. If it appear even in small quantity after this stage commences, the case generally proves fatal. While the blood is mixed only with a transparent fluid, there may be good hopes of recovery, certainly better than under the same circumstances in any other species of phthisis. A similar observation applies to the pus-like expectoration. If there be no admixture of blood, there may be good hopes of recovery, if the disease has not lasted long; and certainly much better than under the same circumstances in other species of it, though expectorated matter is less apt than in these to assume a sanious appearance; but when this occurs, it seems to indicate nearly as much danger as in them. If this happen under the proper treatment, there is no hope. Nearly the same may be said of every admixture of pus-like matter and blood occurring under these circumstances.

I here wave all discussion respecting the means of distinguishing pus and mucus. In my treatise on febrile diseases, I have considered the question at length. It is necessary in practice to have means of judging independent of nice experiments. Whether the matter I call pus-like, be pus or not, is not here the question; it is that to which the

observations, which I am about to lay before the reader, apply. The only criteria, which I have found necessary in practice, are its pus-like appearance, and its sinking when so agitated in water as to separate it from the tough mucus, with which it is mixed. I am inclined to think that this substance is almost always real pus. But if we know what states of disease are connected with what appearances in the expectorated matter, it is of comparatively little consequence whether what we see be pus or not.

The breathing in the earlier stages of this species of phthisis, is sometimes more oppressed by the recumbent posture, than in other forms of the disease; and is more frequently attended with a sense of tightness across the pit of the stomach. The same observations which apply to the cough in the recumbent position, and after eating, apply to the dyspnœa; but it often happens in the early stages, that there is little or no dyspnœa; and there is very rarely, except in the advanced stages, that marked dyspnœa on exercise, which so frequently attends even the commencement of other forms of the disease.

There is often little or no pain. In many cases the patient is subject to a dull pain in the pit of the stomach, or pretty low down in the left side of the chest; more rarely the pain is in the same part in the right side. There is hardly ever a fixed pain

high in the chest, although in some cases there is an uneasy sensation and a sense of oppression under the sternum. The patient sometimes complains of darting pains in various parts of the chest, and frequently in more distant parts, particularly in the limbs, back and shoulders, and is often subject to headach.

The hectic fever in the earlier stages is hardly ever so completely formed as in other species of phthisis, and sometimes there is a copious purulent expectoration with but slight fever, and that not at all assuming the form of hectic, the skin remaining dry in the morning, and there being little or no evening exacerbation; a state of the symptoms hardly ever observed in other forms of the disease.

The emaciation is seldom so rapid as in other species of phthisis, but seems to keep pace with the state of the fever.

Such is the manner in which the symptoms common to all forms of phthisis are modified in this species of it, but a diagnosis resting merely on the modification of symptoms must always be fallacious; it is therefore fortunate that in the present instance, there is superadded to the usual symptoms of phthisis, others peculiar to this species, by which, with very little attention, it may always be distinguished; symptoms indicating a deranged

state of the digestive organs. The patient is often distressed with flatulence and irregular bowels, the tongue is furred, the appetite for the most part, contrary to what is usual in other forms of the disease, much impaired, the fæces seldom well coloured, and the epigastric region more or less full and tender on pressure. These symptoms vary much at different times, but the patient is hardly ever free from them. The connection between them and the pulmonary symptoms is rendered evident by the latter increasing with the former, so that when the epigastric region is very full and tender, the cough and dyspnœa are more troublesome; and on the fulness and tenderness subsiding, the pulmonary symptoms abate. Even the rising of wind from the stomach often, for the time, removes the tendency to cough.

The foregoing are the symptoms of the more early stages of that species of phthisis which I am endeavouring to distinguish, because I have found it requires a very different plan of treatment from other forms of this disease. In its advanced stages, it approaches more and more to these forms. All the symptoms, which more particularly indicate a tubercular state of the lungs, shew themselves; the cough is more constant, and partakes more of the hacking kind; the breathing is more affected by exercise, the hectic is more completely formed, the fulness and tendency of the epigastric region are often lessened, and sometimes wholly disap-

pear, which, if the pulmonary symptoms continue unabated, always, I believe, affords a fatal prognosis. The patient at length sinks with precisely the same symptoms as in other species of phthisis. In addition to these, particularly if the affection of the digestive organs has been neglected, some of the more prominent consequences of this affection sometimes shew themselves, particularly dropsy of the belly, which I never knew to supervene in other cases of phthisis.

Of the Causes.

The species of phthisis which I am considering arises from all the causes of this disease, with the exception of those whose operation is confined to the lungs themselves, the inhaling of dust, other diseases of the lungs, the bones pressing unequally on them, &c. yet its causes are not less numerous than those of other forms of phthisis. To compensate for the want of those causes immediately affecting the lungs, we have a numerous set of causes affecting the digestive organs. Drunkards, at that time of life which disposes to phthisis, frequently fall a sacrifice to this form of the disease; and those who have been long subject to severe attacks of dyspepsia, and what are called bilious complaints, are liable to it. In short we perceive equally in its causes, as in its symptoms, its connection with the state of the digestive organs, from which it may be justly termed dyspeptic phthisis.

It particularly deserves attention, that, in many families, this form of the disease alone appears. When this is the case, its fatal effects may generally, I believe, be prevented by carefully avoiding the causes which tend to debilitate the digestive organs, and watching the first approach of the disease.

Of the appearances on dissection.

The appearances of the lungs are generally much the same as in other cases of phthisis; but we almost always find at the same time, either a diseased state of the liver, or traces of disease having existed in it. In cases where the disease of the liver has been severe, and the patient has died as much of this disease, as of that of the lungs, I have repeatedly found those parts of the lungs in the neighbourhood of the liver, alone affected, the left side appearing sound or nearly so. In general, however, the affection of the liver seems to have little immediate share in the cause of death, and the patient lives, as in other cases of phthisis, till almost the whole lungs are rendered incapable of their function. Here, as in many other cases, we often have occasion to remark to what extent change of structure even in the vital organs, may go without destroying life, when the change is very slowly effected; a circumstance which, perhaps more than any other, shews the resources in the structure of the body itself, against the effects of disease.

It is not at all uncommon in dyspeptic phthisis to find the spleen as well as the liver diseased. As the coeliac artery dividing into three branches supplies the liver, stomach and spleen, may we not suppose that the pain so frequently felt in the left side and in the stomach in this form of phthisis, arises from more than the due quantity of blood being thrown into the vessels of these organs in consequence of the obstructed state of the liver? is it owing to their being supplied by the same artery, that we so frequently find a diseased state of the liver and spleen in the same subject, and that inflammations of these organs so frequently alternate with each other? I have repeatedly seen the inflammation pass from the one organ to the other, and back again to that first affected.

Of the nature of dyspeptic phthisis.

It is impossible to observe even in a cursory manner the symptoms of this disease, without remarking that the state of the lungs is connected with that of the digestive organs. Its causes we have seen afford the same inference, and in those who die of it, I have just had occasion to remark, we very frequently find a diseased state, or proofs of a diseased state having existed in one of the organs of digestion, whose intimate sympathy with the others, numberless observations prove. A question of the first importance in the treatment of this disease here arises. What is the nature of the

relation observed between the affection of the lungs and that of the digestive organs in this species of phthisis? is the one a consequence of the other, or are they simultaneous affections arising from a common cause? they are not simultaneous affections, for the one always precedes the other. In by far the majority of cases in which both the lungs and digestive organs are affected, the affection of the digestive organs precedes that of the lungs. In some instances we find the affection of the lungs the primary disease. But in these, the case does not assume the form above described, but that of simple phthisis; and the hepatic affection, which is always the most prominent feature of this derangement in the digestive organs, does not shew itself till a late period of the disease, and then little if at all influences the essential symptoms.

We often observe the first of these forms of the disease arise from causes evidently acting on the digestive organs, and as far as we can perceive in no degree on the lungs, and the last from causes evidently acting on the lungs, and in no degree on the digestive organs.

It seems to be a necessary inference from the preceding facts, that a diseased state of either set of organs may produce that of the other. But the tendency of disease to spread from the digestive organs to the lungs is much greater, than that to

spread from the latter to the former. We often see a slight degree of derangement in the digestive organs produce cough and other pulmonary symptoms, and derangement seldom exists in all the digestive organs without producing more or less of these symptoms, whereas it is only after disease has advanced very far in the lungs, that it is apt to spread to the digestive organs, and in the greater number of instances it proves fatal without spreading to them.

When to these circumstances we add, that all the peculiarities of those cases of phthisis, which are from the commencement accompanied with disease of the digestive organs, may be easily explained by the existence of this disease; and that, as I shall presently have occasion to point out more at length, every thing which relieves this disease, at the same time relieves the pulmonary symptoms that attend it, the inference appears to be unavoidable, that in the species of phthisis which is the subject of this paper, the pulmonary disease arises from that of the digestive organs. It is not to be overlooked, however, that it is in those most disposed to pulmonary affection that disease of the digestive organs most frequently produces it. We consequently see this species of phthisis most apt to occur in the same habit which disposes to other forms of that disease. On the other hand, when the digestive organs are naturally weak, or powerful causes of disease in them have existed, particu-

larly the free use of spirituous liquors, we often see it occurring in habits apparently least disposed to pulmonary affection.

It will place in a clearer light what has been said of the nature of the disease before us, to take a cursory view of the sympathy which exists between the state of the digestive organs, and the principal seat of derangement in some other diseases. Let me here refer to a work, which no physician, whatever may be the extent of his experience and the accuracy of his observation, can peruse without advantage, although the modesty of its author has induced him to address it only to those belonging to his own branch of the profession, I mean the work of Mr. Abernethy, entitled "*Surgical observations on the constitutional origin and treatment of local diseases.*" I believe that experience has led many others to similar views, but no other person has laid them before the public in the way in which Mr. Abernethy has done, and those physicians whose attention has been directed the same way must be happy to see in Mr. Abernethy's work, a confirmation of their own observations; and such a confirmation as they were not likely to receive from the work of a physician. The physician's attention is directed to internal disease; there his inquiries naturally begin. Mr. Abernethy's, for a similar reason, began with external disease, and I believe every physician circumstanced as I was, will feel as I felt on reading

his work. I unexpectedly met him on a road where I did not expect to meet a surgeon, but where the assistance of a surgeon was of greater consequence to me than that of any physician could have been. From local, he was unavoidably carrying on his observations to general diseases. The sympathies in question so connect them that it was impossible for him to do otherwise. From general, I was, for the same reason, carrying mine on to local diseases. In the case of dyspeptic phthisis which Mr. Abernethy relates, the reader will find the principle of the treatment which I have employed in phthisis for more than twelve years, as many medical men of this neighbourhood have witnessed, and the following cases which occurred to me before I read his work, or was acquainted with his opinions, and which I shall relate as concisely as I can, will afford a confirmation of these opinions and of the practice founded on them in local diseases. I mention these cases, because like Mr. Abernethy's case of phthisis, they tend to confirm the accuracy both of his observations and mine, for surely no stronger confirmation can be required of any opinion, than two observers wholly unconnected, setting out from the most opposite quarters, and meeting in the same point. My plans of practice are not precisely the same as Mr. Abernethy's, and in particular the mode of giving mercury in internal disease, which I have found most successful, is different from his, but the general principle is the same.

A gentleman consulted me for severe pains in the legs, for which he had been treated unsuccessfully for two years. There was no reason to suspect syphilitic affection. I found his digestive organs deranged, and the epigastric region tender on pressure. He took a grain of blue pill combined with stomachic, and opening medicines three or four times a day; and was cured in a few weeks. A gentleman had sores continually breaking out on various parts of the body which had proved very obstinate, for which he had been advised to go through a regular course of mercury. The digestion was deranged, and the epigastrium tender. I dissuaded him from any thing like a regular course of mercury. He took stomachic and opening medicines, with a grain of calomel every second or third night, and was cured in about a fortnight. A lady after repeated attacks of illness remained very weak; glandular swellings appeared in different parts of the body, and it was feared that a general breaking up of the constitution was about to take place. The appetite failed, the bowels were disordered, and the epigastrium was tender. She took sometimes a grain of blue pill two or three times a day, with stomachic and opening medicines, and at other times either a few grains of blue pill, or one grain of calomel, according to the state of the bowels every second or third night; no application being made to the glandular swellings, but occasionally two or three leeches when they were tender on pressure. In about three

months her complaints disappeared under this plan of treatment, nothing but a depression of spirits remaining, which was removed by change of air.

In one respect Mr. Abernethy's mode of giving mercury in the cases above alluded to, and that to which I have been led in internal disease, arising from the sympathy of other parts with the digestive organs agree. It is from small and undebilitating quantities that good effects are to be expected; in such cases, given otherwise it debilitates the digestive organs, and often thus increases the disease. The chief difference in our modes of giving it is, that he gives large doses at long intervals, I give minute doses at short intervals. This difference has probably arisen from the nature of the diseases in which we have chiefly practised. Since I became acquainted with Mr. Abernethy's plan, I have tried it in internal disease, but have not found it so successful as that which I have been accustomed to pursue. Of the comparative effects of these plans in local diseases, I have not had sufficient opportunities of judging; and Mr. Abernethy does not mention his having tried the plan which I shall presently have occasion more particularly to lay before the reader.

Mr. Abernethy mentions other internal diseases, particularly those of the head and heart, caused by the deranged state of the digestive organs. I have repeatedly seen his observations on those diseases

confirmed, and could relate several cases in which the patient had for years laboured under symptoms of *angina pectoris*, and had been treated for this disease, in which the symptoms yielded in a few weeks to small doses of blue pill combined with stomachic and opening medicines. In such cases we must of course suppose, that no organic disease of the heart had yet supervened. His observations on the brain are well illustrated by two excellent treatises lately published by Dr. Cheyne*, and Dr. Yeates†, on the disease which has been called hydrocephalus internus. It seems surprising that the immediate connection of this disease with the state of the digestive organs should so long have escaped physicians.

It is not meant that hydrocephalus, as Dr. Smith‡ more correctly terms it, always arises from affections of these organs. In many instances it evidently arises from causes acting on the brain itself; but were I to speak from my own experience, I should say, that in at least five cases out of six it arises from the former cause, and that in all cases, preserving a proper state of the digestive

* A second Essay on Hydrocephalus Acutus or Dropsy in the Brain, by J. Cheyne, M.D. &c. Dublin, 1815.

† A statement of the early symptoms which lead to the disease termed water in the brain, &c. in a letter to Martin Wall, Esq. M.D. &c. by G. D. Yeates, M.D. &c. London, 1815.

‡ A treatise on hydrocephalus or dropsy of the brain, by J. C. Smith, M.D. &c. London, 1814.

organs is the best means of prevention ; for even where it arises from other causes, their tendency to produce it will be greater or less according to the state of these organs.

The effects of the sympathy which exists between different parts of the animal body in the production of disease, does not seem to have obtained the attention it deserves. It is well known that nervous affections will, if I may use the expression, mimic the symptoms of almost every disease, but it does not seem to be generally admitted, although I think we have sufficient proof of the fact, that if this mimic disease is kept up for a certain length of time it will be converted into the real disease, let the cause which produced it be what it may. I cannot chuse a more striking instance to illustrate this observation, than one intimately connected with the form of phthisis which we are considering.

In the 43d, 44th, and 45th sections of Morgagni's 21st epistle, the reader will find the pleuritis verminosa treated of at some length. He mentions one case in which all the symptoms of pleurisy were well marked, that terminated favourably by a bloody vomiting which brought up a lumbricus. We might in this instance attribute the relief obtained rather to the loss of blood than the expulsion of the worm ; but he refers to a paper of Pedratto on the pleuritis verminosa, where the relief obtained by the expulsion of worms from the

stomach and intestines, particularly from the former, is unequivocally proved. It there appears that all who vomited the worms or passed them by stool recovered, while those who did not, died. All the common means of treatment in pneumonia failed, anthelmintics alone were successful. While the expulsion of worms from the *primæ viæ* immediately removed the disease, it is impossible for us to believe that real inflammation of the lungs had existed, yet in those in whom the disease proved fatal, the same appearances were found in the thoracic viscera, as in those who die of other forms of pneumonia. Thus disordered digestion produces palpitation and syncope, and if these symptoms continue to recur for a great length of time, they end in real disease of the heart. Thus the same cause produces drowsiness and inability, which if long continued, ends in real disease of the brain. They produce cough and dyspnœa, and if long continued, real disease of the lungs. In all these and many similar instances, no real disease seems at first to exist in the parts sympathetically affected. We must suppose, however, that some degree of debility or aptitude to disease exists in them, which determines the sympathy to affect them, in preference to other parts, with which the part originally affected equally sympathises; or there may be something in the original affection, which we cannot trace, that determines it to sympathise more with one part than another.

We see the same law obtaining in every instance: when affections of the liver produce pain in the shoulder, there is no disease in this part; the pain is merely sympathetic, we may press and rub the shoulder, the patient feels no more uneasiness from it than he would in the other shoulder; but after the pain has continued for a considerable time, the shoulder itself becomes affected. The patient cannot bear to have it pressed, and sometimes cannot lie upon it. When inflammation spreads from the intercostal muscles to the lungs, it does not traverse the pleura, reaching the lungs by the fold which reflects this membrane over them; it passes at once from the pleura of the ribs to that of the lungs, between which there is no direct communication either of vessels or nerves, for this often happens previous to any adhesion having taken place. Why is inflammation of the bowels as apt to spread to the contiguous bowels, with which they have no immediate connection, as to those parts which are in continuation with the diseased part? why does loss of blood by the application of a few leeches to the skin over an inflamed viscus, often give more relief than the loss of many times as much blood from a distant part? why does the skin over diseased viscera, even when no adhesions have taken place, frequently change its colour, especially as death approaches, as I have often witnessed? why do eruptions of the skin, often very slight, alternate with serious diseases of

internal parts? It is needless to multiply such instances; whoever observes with attention the phenomena of disease will find them numberless. They are all referable to one law, by which neighbouring parts always, and distant parts often sympathise, independently of any direct communication either of nerves or vessels.

How we are to account for this sympathy I shall not here inquire. It teaches us an important lesson in the prevention of disease, that the first beginnings of many sympathetic affections, deemed trivial, should be watched with care. The headach frequently occurring from disordered stomach may at length become a disease of the head itself, and there is no viscus, we have reason to believe, in which disease may not arise in the same way. It teaches us a lesson of equal importance in the treatment of diseases, to make ourselves minutely acquainted with their history, in order to ascertain, if possible, whether sympathy with other parts had contributed to produce disease in the parts now most prominently affected; for if this be the case, and the affection of the former still continue, we shall attempt in vain to restore health by means directed only to the seat of the prominent disease. In this way, we have reason to believe many cases are allowed to prove fatal, for which a remedy may be found if we trace them to their source. The most remarkable instance of this kind which has

occurred to me is the dyspeptic phthisis, on the treatment of which, I am now to offer the remarks which a long attention to it has suggested.

Of the treatment of dyspeptic phthisis.

In speaking of the treatment of this form of phthisis, I shall follow the same plan which was adopted in speaking of its symptoms, confining myself to those circumstances in which it differs from the other species of phthisis.

As it appears both from the symptoms and causes of dyspeptic phthisis, that the affection of the lungs is influenced by the state of the digestive organs, it is reasonable to suppose that the means which tend to improve their functions will here be a useful auxiliary to those usually employed in phthisis. In the dyspeptic we always perceive sooner or later some fulness and tenderness of the epigastric region. It is after these have supervened that disorder of the digestive organs is apt to affect the lungs; and it is in proportion as we relieve them, that we find the affection of the lungs relieved. This fulness and tenderness which we have found the best diagnostic of dyspeptic phthisis, appears from dissection to arise chiefly from an affection of the liver, and the degree of these symptoms is generally a pretty correct measure of its degree.

This species of phthisis may be divided into three

stages, in which the prognosis and mode of treatment are different. In the first, the affection of the lungs is merely sympathetic, so that when the cause which produces it is removed, it ceases of course. This stage is distinguished by the short time which the disease has lasted, by the general mildness of the symptoms *, the fever in particular being very slight, and by there generally being no expectoration but what the cough itself seems to occasion, consisting of a colourless phlegm, and for the most part in small quantity. Sometimes what is expectorated is in masses of a tough glairy appearance, and of a blackish hue as if mixed with a small portion of carbon, which seem to have lain some time in the lungs, the expectoration of which relieves the cough, which in this case is seldom very troublesome. This last appearance of the expectorated matter generally indicates the very mildest form of the disease; it is when there is no expectoration, or when it is thin, scanty, and difficult, that the disease is most apt to degenerate into the more alarming forms.

In the second stage of dyspeptic phthisis the continuance of the sympathetic affection has produced actual disease in the lungs. There are two ways in which this disease indicates itself. The

* I do not here speak of active inflammation of the liver which also produces cough and dyspnoea, and whose phenomena further illustrate the sympathy of which I have had occasion to say so much.

most frequent is by some degree of inflammation supervening on the surface of some part of the bronchiæ or air cells, in consequence of which the expectorated matter begins to be mixed with small portions of a pus-like substance, which gradually increases as the inflammation extends, till the quantity we have seen is often astonishingly great. Sir Everard Home, in a treatise on the properties of pus, has shewn how readily irritation of secreting surfaces produces it, independently of any breach of substance. Less frequently small vessels now and then give way, which prevents the inflammatory action, so that the expectorated matter presents no degree of the purulent appearance, but is occasionally mixed with blood. The symptoms now assume a more formidable character, the tendency to fever in particular is greater; but it seldom completely puts on the form of hectic. In this stage there is either no breach of substance in the lungs, or the little vessels which from time to time give way, soon heal. It seems to be at this period that tubercles generally form. These going on to suppuration and ulceration, or the irritated surface of the bronchiæ and air-cells becoming ulcerated, the last stage commences, in which dyspeptic phthisis is nearly as fatal as any other form of the disease.

This stage is indicated by the aggravation of all the symptoms, particularly by the fever assuming more perfectly the form of hectic, and the expect-

torated matter occasionally containing both a pus-like matter and blood. It often happens however, especially where there has been no expectoration of blood at an early period, that no blood is ever expectorated. In this last stage the expectorated matter occasionally assumes all the various appearances observed in the last stage of other cases of phthisis.

In the first of the above stages the disease generally yields readily, except the dyspeptic symptoms are peculiarly obstinate (in which case some degree of them has generally been of long standing, or the patient has suffered from former attacks of the disease), or there is such a tendency to a tubercular state of the lungs, that the hepatic affection which I have had occasion to observe always shews itself before dyspepsia produces phthisis, and this state of the lungs occurs almost at the same time. Such appear to me to be the chief circumstances which sometimes render the disease fatal even when properly treated at this early period; but so generally successful is a proper treatment at this period, that it required many years' observation to convince me that it will not always succeed, and to satisfy my mind respecting the causes of its failure. The last of the causes just mentioned, I am convinced is the most frequent of them. It is evident that when the tendency to tubercles of the lungs is so great, the case is pretty much of the same nature with that form of phthisis

which originates in the lungs, whose fatal tendency no mode of treatment, however early adopted, will always prevent.

It always adds much to the unfavourable prognosis to find that the patient has scrophulous enlargement of the more external glands, which is often such as cannot be seen, but only felt. It will be generally admitted, I believe, that external glandular swellings and suppurations often tend to prevent internal disease. We see in the same family, some fall a sacrifice to phthisis, while others, labouring under these swellings, escape it. I have seen a person in the last stage of phthisis saved by the glands of the neck suddenly swelling and suppurating. But that slight enlargement of the external glands which may be rather felt than seen, while it indicates, is not of sufficient importance to obviate the tendency to internal disease.

Provided there is no great tendency to tubercles, and the hepatic affection is not unusually obstinate, the first stage of hepatic phthisis generally yields to the usual means of relieving the cough and tendency to fever, combined with such an attention to diet as prevents the stomach being oppressed, keeping up a freer action of the bowels than is necessary in health, and taking care by occasional doses of blue pill or calomel, according as the bowels are more or less easily acted on, to preserve a sufficiently copious and healthy secretion of bile.

I have generally given the mercurial, for the most part one grain of calomel combined with the compound extract of colocynth, every second or third night, desiring the patient not to go out the next day, till it shall have passed off, and if it does not pass off in a couple of hours after rising, to assist it by a moderate dose of Epsom salts. In addition to these means stomachic medicines were generally used, particularly when the appetite was much impaired.

All of this class of medicines which possess any heating quality have appeared objectionable. Even gentian, so useful in the cases mentioned by Mr. Abernethy, seems often to increase the cough and the tenderness of the epigastrium. I have found extract of camomile flowers, combined with small quantities of the powder or oil of carraway among the best stomachics in such cases; and unless the strength be much reduced, Epsom salts have appeared to be the best assistant to the cathartic effects of the mercurial. The latter I have given, not for the purpose of moving the bowels, but improving the state of the bile, and therefore only in very small doses. I have seldom seen much advantage arise from giving more than one grain of calomel. There is the strongest objection in all diseases tending to phthisis to debilitating doses of any medicine.

The second stage of dyspeptic phthisis requires

a plan of treatment essentially different from the foregoing. When the disease has been neglected till this stage commences, which is very frequently the case, or we find that notwithstanding the employment of the above means, the sputa begin to assume a purulent appearance, or to be mixed with blood, the tenderness of the epigastrium continuing, and an unhealthy secretion of bile constantly recurring, we may be assured that the foregoing means will be ineffectual; and that if time be lost with them till the third stage supervenes, life will be sacrificed.

The following is the plan which, under such circumstances, I have for the last nine or ten years adopted, and the efficacy of which has induced me to offer these observations to the attention of the public. Either laying aside or continuing the occasional grain of calomel as the state of the bowels seems to require, I have given one grain of the blue pill combined with some mild stomachic, two or three times in the course of twenty-four hours, continuing it either till the tenderness of the epigastric region yielded, and a proper secretion of bile was restored, or the gums appeared a little redder and fuller than natural.

As the tenderness of the epigastrium abates, and the fæces assume the natural appearance, in by far the majority of cases the pulmonary symptoms

gradually disappear. It has been said by many who have seen my practice, that little is to be expected from such minute doses, but I have found the gradual effect produced by such doses on the whole much more beneficial, than the more sudden effects resulting from larger ones, which often induce a degree of debility that more than compensates for the advantage obtained from them. There are no other circumstances perhaps, under which mercury is given, where it is of so much consequence to support the strength. The evident advantage of this in all cases of phthisis is such, as to have induced some to adopt the tonic plan in defiance of every counterindication; by which I have often, particularly in this species of phthisis, which bears tonics worse than that which originates in the lungs, seen those who, there was reason to believe, might have recovered, lost; and those whose illness might have been long protracted, suddenly destroyed.

With the foregoing, I have always combined local means for the purpose of relieving the tenderness of the epigastrium. If it be not considerable, a succession of small blisters applied over the part is sufficient. If it be so, the blisters should be preceded by the loss of from two to four ounces of blood from the part, from which practice, if the pulse be hard, although the tenderness be not considerable, great advantage often arises. When

the disease is obstinate or has repeatedly recurred, a permanent discharge from this part, especially that by a seton, is often highly beneficial.

By such local measures the quantity of mercury required is much lessened. If the tenderness be very great indeed, no quantity will succeed without such means as more directly reduce the inflammatory action.

For the purpose of lessening the quantity of mercury, I have also combined with it such other means as tend to promote a regular and healthy secretion of bile. From this tendency of small doses of Epsom salts, they are preferable to other cathartics, provided they are equally suitable in other respects; but of all the means which I have employed with this view, I have found none equal to the dandelion. It ought always perhaps to be given in some form or other in dyspeptic phthisis. But it unfortunately tends to oppress the stomach, and can often on this account be given only in small doses, in which it is of little use. It is always proper to combine it with such bitters and aromatics as suit the case. When the stomach bears it well, so that the patient can take a decoction of it poured upon camomile flowers for his common drink, or what I have found better, two or three table-spoonsful of the fresh expressed juice in camomile tea, three times a day, its beneficial effects are frequently very striking. Advantage often

arises from infusing a few cloves with the camomile flowers. When the dandelion can be given in the above ways, I often give only half a grain of the blue pill three times a day, and, I think, generally find as much advantage from it as from a whole grain without the dandelion. Many, I know, will regard the exhibition of such minute doses of mercury as little better than trifling; if however they make a patient trial of them, they will, I am persuaded, alter their opinion.

All purgatives seem to have more or less the effect of promoting a due flow of bile as well as of the other secretions poured into the bowels, and to this I would chiefly ascribe the great advantage derived from them in so many diseases, respecting which we have received so much practical information from Dr. Hamilton's invaluable work on purgatives.

If neither the tenderness of the epigastrium be removed, nor the gums a little affected by the above plan in about a fortnight, I have gradually increased the quantity of the blue pill till one of these effects took place. If either take place without relieving the pulmonary symptoms, the prognosis is bad. If the tenderness of the epigastrium continue, the hepatic affection is unusually obstinate; if this be wholly removed without materially relieving the pulmonary symptoms, we have reason to believe that the disease has made great progress in the

lungs. It is surprising from what states the lungs will sometimes recover when relieved from the irritation of the hepatic affection. I have seen many recover, not only whose friends, but whose physicians had lost hope of them. But in these cases the proper means had not been tried; if these have failed, the hope is no better than in other species of phthisis.

Where the failure of relief proceeds from the obstinacy of the hepatic affection, some hope arises from a fuller mercurial course, but this hope is often fallacious; for although such an alterative plan as I have recommended may be pursued without any diminution of strength, and is generally, by relieving the disease, attended with an improvement of it; a course that greatly affects the mouth, although powerful in relieving the hepatic affection, produces a most unfavourable impression on the pulmonary system by the debility it occasions. In such a case, however, it must with caution be tried, the only alternative being a certainly fatal termination.

I may here observe, nothing indeed is more evident, than that the quantity of mercury applied to the bowels, or to the skin, is a most fallacious measure of the quantity which the patient actually receives. To the skin in particular in this disease from the languid state of its absorbents, a great deal may be applied and hardly any received by

the system. I have often seen the patient much exhausted by the rubbing, and yet, as appeared from the state of the mouth, receiving very little of the medicine. Sometimes when the patient bears it well, the exercise of rubbing seems beneficial, so little mercury is often received by the skin in phthisis, that I have sometimes thought this the only advantage the patient derived from the rubbing. In other cases it enters more readily. But independently of this objection, I have found the application of mercury to the skin much less beneficial than to the stomach and bowels in this disease, no doubt from its local effect on these organs and the biliary system being less perfect, so that I have of late seldom prescribed it by the skin, except when its internal use irritated the bowels, an effect which is generally prevented by the mild anodynes that are otherwise proper in almost all forms of phthisis. It is not uncommon in this disease to find the whole absorbent system so languid, that little mercury is received, even when it is given internally. It is almost needless to add, that its good, as well as its bad effects, if we except mere irritation of the bowels, depend on the quantity which the system receives.

It sometimes happens that the tenderness of the epigastrium is wholly, but the pulmonary symptoms only partially relieved by the above plan. In this case the hepatic affection is apt to recur, always bringing with it an increase of the pulmo-

nary symptoms, till the structure of the lungs is at length destroyed. Here, if the recurrence of the hepatic affection be neglected, the fatal termination is rapid. If it be carefully watched and relieved as it appears, the case is protracted, and the decline of the patient gradual. I have known cases where the progress of the disease had by such means been so retarded, that there was little increase in it, in the space of several months, prove rapidly fatal on the adoption of another plan, in consequence of the patient's coming under the care of medical men who were not aware of the history of the case. In such cases I have already had occasion to observe, the neglected hepatic affection, towards the fatal termination, sometimes produces dropsy of the belly. Under any plan of treatment these cases generally prove fatal at last, and the only chance of success is afforded by constantly watching and removing the first recurrence of hepatic affection. It is necessary to have been in the habit of watching for it, to be able to distinguish such degrees of it as are often capable of greatly injuring lungs already diseased. Although the tenderness be very uniformly in the epigastrium, sometimes, though rarely, its chief seat is in the right side.

But the most fatal case is when the hepatic affection finally disappears, the seat of the disease being wholly transferred to the lungs, as happens frequently in the last stage of this species of phthisis.

In this case there is no hope ; while the hepatic affection continues to recur, there is always some hope, however small, that on its final removal, the lungs may recover themselves.

With respect to the parts of the treatment which are common to dyspeptic and other forms of phthisis, I have little to offer as peculiar to the former. I think I have found a combination of the extracts of white poppy and conium, the best anodyne in this form of the disease. Opium is more inclined to constipate the bowels and retard the due flow of bile, and the anodyne power of the hyoscyamus in such doses as are safe, is not to be depended on. When the epigastrium is very tender, animal food and fermented liquors are peculiarly injurious. Of cathartics I have already spoken.

Some suppose that mercury is often useful in other forms of phthisis. I have never found it so, but I think, when I have been obliged to employ it on account of other diseases being complicated with them, always hurtful. I have remarked that in these forms of the disease it never seems to improve the strength, as it generally does in dyspeptic phthisis, by improving the digestion. In them the digestion is generally good, and we have nothing to compensate for the debilitating effects of the mercury.

If there be any case of idiopathic phthisis in which mercury is proper, it is one which I have already had occasion to mention, in which the pulmonary disease produces diseases of the digestive organs, of which we still find hepatic affection the prominent feature, and which always tends to aggravate the original disease. I have not however found it useful in such cases, which I think may be easily explained. In them the pulmonary affection is far advanced before the affection of the digestive organs appears, and both on this account and because the former is the original disease, it cannot be removed by removing the latter. Besides it is not likely that small doses of mercury will ever remove the hepatic disease, while the cause which produced it still continues to operate; and large doses, if they are capable of removing it, are here out of the question.

An alterative plan, conducted in the way above pointed out, I have found equally serviceable in what are called nervous diseases, when they arise, as frequently happens, from the above state of the digestive organs. Thus habitual depression of spirits, headache, palpitation and many other complaints of the same description may be relieved.

Worcester, June 18, 1816.