A Lecture

ON

THE MENTAL ORIGIN OF NEURASTHENIA AND ITS BEARING ON TREATMENT.

DELIVERED AT THE POLYCLINIC, LONDON.

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MY object in addressing you on the subject selected for to-night's lecture is, if possible, to convince you that neurasthenia is essentially a disorder of the mind, and that it can only be treated successfully when this fact has been recognized.

My time is short, and you are all so familiar with the symptomatology of neurasthenia that I feel it will be unnecessary to describe the condition, but will proceed at once to the view of its origin that I wish to lay before you.

What, you will ask, is the evidence that the origin of this chameleon disorder—which is at present at once the backbone and bugbear of general practice—is mental? for I need scarcely remind you that there are some who regard bodily troubles as the primary cause. It is clearly of the utmost importance to recognize the cause of the neurasthenic condition, and close inquiry furnishes full evidence that it arises from morbid mental states.

ETIOLOGY.

The first fact I would point to is that in neurasthenia the physical symptoms are without pathological basis (in any individual case this must, of course, be ascertained by careful physical examination). To the patient the symptoms are as real as though some physical lesion existed, and often the description given of them is so lifelike as to deceive the doctor, who, fearful of being in the wrong, anxious to safeguard his reputation, and desirous of keeping his patient, will, even in cases of considerable doubt, accept the patient's lead, hedge over the diagnosis, and thus with disastrous results confirm the impression that some serious disease exists. The responsibility of the medical attendant in these circumstances is truly great, but to this point I shall return. In some cases the digestive organs are marked out by the patient as the seat of disturbance, or it may be the heart, or the genito-urinary system. What determines the bias of a patient's mind towards a definite organ is seldom of much moment; in some cases it is no doubt a functional derangement of the organ that in the first instance attracts attention, or it may be a recognized and dreaded hereditary tendency, or an incautious professional opinion suggesting, for example, uterine displacement, or kidney motility, or weak heart. However, the cause of the local physical symptoms is unimportant, as usually by the time the doctor's aid is sought there is little or nothing to combat but the mental state.

The next clinical fact of great importance is to be sought in the mental history of the patient, both family and personal. It may be assumed that with rare exceptions an established nervous temperament has been inherited, though a practical difficulty is often placed in the way of ascertaining this fact through the repugnance on the part of the patient and friends to admitting a family history. It is a real misfortune that most people should confound nervousness with timidity—apprehensiveness—and are likely to resent an inquiry into their mental history lest a charge of cowardice should be established. Most unfortunately there is no word in the language that would be understood by patient, friends, and doctor alike to convey the true significance of the term "nervous." The truth is that a highly-organized nervous system is a most valuable equipment in life; it enables its possessor to be and to do as well as to suffer. But just as you can get a purer tone and more exquisite music out of a fine violin than from a common one, so when injured or badly handled its dissonances are apt to be more excruciating. This aspect of the matter is not generally understood; even educated people fail to grasp the difference between the nervous temperament and the state of being easily frightened, and when you begin to make inquiries as to mental antecedents they will fence the question and endeavour to persuade you that there was nothing nervous about them until a certain illness—influenza, for example, or mental strain, or shock—developed the condition. Timidity is no doubt one outcome of an ill-managed nervous temperament, but not necessarily so, and many neurasthenics are brave and tranquil in the face of real danger, even if that danger be death.

It may, then, be difficult to trace a definite family history, but with care this can usually be made out, and not infrequently it will include cases of insanity. Clinically considered, this is of much importance in establishing the mental origin of the neurasthenic disorder; in practice what it points to is the fact that serious dangers particularly threaten persons who inherit a nervous temperament, for whom, therefore, special safeguards in home surroundings and personal habits ought to be observed, just as those who inherit a tendency to tuberculous mischief must observe careful precautions in their surroundings and manner of life if they are to escape harm.

But, after all, the player on the violin is the patient himself, and it is with the individual patient that we have to deal. Even when there is an unmistakable family history of nervous disorders, with possibly a case or two of insanity, the patient in early life may exhibit no striking deviation from the normal; perhaps nothing more than a certain lack of self-confidence. Sooner or later, however, there is shown a tendency to attach undue importance to matters that affect the personal feelings, and this strongly affects the subsequent course of affairs. The patient becomes hypersensitive, and gradually surrenders control of his thoughts at will; instead of choosing a line of thought and concentrating upon it, he is dominated by some personal matter, broods over some real or fancied trouble, allowing it to engross attention to the exclusion of all other matters of interest. The habit of indulging in introspection grows upon him, and from being a useful and wholesome practice in the main as exercised by a healthy, well-balanced mind, it becomes a source of danger when it defies control, and then perverts, hampers, and circumscribes mental action. At first the neurasthenic is conscious of a struggle to maintain his interest in affairs outside his own personal life, but by an effort he can do so, and to this end he is helped by continuing at work, which, even though it be uncongenial, serves to distract his attention from himself. Later on he fails to make the effort, or some illness or shock breaks down what little control he still possessed, and so the natural inclination usurps ascendancy: he becomes more and more self-centred and despondent, and loses the power of forming an intelligent judgement upon matters that relate to his health. In some cases the usual feeling of blameworthiness consequent on giving way to bad habits comes into operation, with further distressing results; others are spared this hope-robbing demoralization because they fail to recognize that the fixed idea can be in any sense the outcome of a bad habit, and therefore acquit themselves of all blame. These changes traced from the beginning are essentially mental; the patient abdicates will-power, and takes the path of least resistance.

I am of opinion that overwork, mental strain in business, or other ways, the grief of bereavement, or some alarming shock, do not in themselves produce neurasthenia, and cannot be said to be its cause, though by lowering health and weakening mental control they may contribute to the development of the more serious disturbance. On the other hand, I wish to emphasize the cramping and damaging effect on the mind of uncontrolled and bad habits of thought in early life, partly because of its testimony to the mental origin of neurasthenia, and also on account of a growing conviction that to such habits may be ascribed a great deal of the depression and mental discomfort from which nearly every one suffers at times. I dare say we are all more or less neurasthenic, for neurasthenia seems to range from occasional outbursts of uncontrolled temper or fits of gloom—"moodiness," in fact—to obsession by some one false idea, ending perhaps in insanity. Our unhappy neurasthenic patients forget—if they ever recognized—that the mental horizon of which each individual is the centre may be gloriously wide and embrace the interesting and sunny aspects of life, or may be miserably circumscribed to the petty affairs of one personality who lives under the toils, burdens, and

sorrows of life in a dense shadow that obscures all its joys. Hence the danger of introspection and self-examination to those whose minds are not easily responsive to the common wholesome incentives to thought, and who are not spontaneously attracted by things outside their own limited personal sphere; for these habits tend to fix attention more and more on the central point, the tiny circle from which radiations might go forth to an infinitely far horizon.

I have more than once alluded to insanity in connexion with neurasthenia. A most interesting and important field of investigation is opened up by the inquiry as to what part in the phenomena of neurasthenia is taken by the ordinary consciousness working through the brain (cerebrum), and what by the subconsciousness working through the cerebro-spinal and sympathetic nervous systems; but into this I have unfortunately no time to enter. I can only remark in passing that additional evidence for the mental nature of the disease is offered by the fact, which must be within the experience of most observers, that sometimes neglected cases of neurasthenia —and some cases that are not neglected—do undoubtedly drift into insanity, and occasionally end in suicide.

Finally, it can be shown that the disease does respond, and will only respond, to mental treatment.

THE ATTITUDE OF THE PROFESSION.

At this point it may very properly be asked: What has been the attitude of the profession towards neurasthenia, and what view has influenced the line of policy adopted towards the disease? I am afraid I must say that professional opinion—or at least conduct—has mostly been mistaken and has been fraught with danger to the sufferers and damage to medical reputations. It is a humiliating admission to make, but it has to be made, and the confession is wholesome, that doctors have erred sadly in their dealings with their neurasthenic patients. In palliation it may be added that the majority have erred in ignorance, and others have failed through lack of courage; but there remain some of whom it must be regretfully admitted that they have forgotten their duty and prostituted their high calling. These are hard words, but I fear they are true.

It is much to be regretted that the terms "neurotic," "neurasthenic," "hysterical," "hypochondriacal" are, on the lips of the majority of clinical teachers, terms of opprobrium, whilst systematic university and college lecturers on the principles and practice of medicine omit all reference to the subject, and, further, give effect to their attitude of neglect by excluding questions on the condition from the examination papers. Than this no surer method could be devised to mislead our future practitioners; we ourselves have experienced its ill effects. But although in the past we have had a valid excuse of ignorance, in the future, as light on the subject increases, no such excuse will hold good. To continue the sort of practice that has prevailed will be to deserve and probably incur a charge of downright dishonesty. Do you ask why? Because it will mean that, having in our hands the remedy for a curable disease which is yearly on the increase and more and more threatens the mental and physical welfare of our patients, we yet withhold it.

So long, of course, as the profession regards neurasthenia as akin to ill-nature and bad manners and the neurasthenic as a delinquent who has made the most of doubtful symptoms, the doctor has needed all his sympathy for himself—with, perhaps, a little for the relatives—and it may have been natural, though neither very creditable nor intelligent, to regulate his attitude towards the case by the length of the patient's purse and his own endurance. But this most unfortunate state of affairs has been short-sighted for the doctor, besides inflicting serious injury on the patient. If, on the other hand, we perceive that neurasthenia is a functional nervous disorder which when rationally treated responds like other curable disease to the proper remedy, we help our patients, brighten our own lives, and advance one step more towards the goal of scientific medicine.

The position I wish to take up is that neurasthenia is a definite, genuine disease of mental origin and amenable to treatment. In one short address it is difficult to make this clear and prove it to the satisfaction of all my hearers; but I must risk this, and ask you to consider the position very carefully. The immediate effect of adopting it, as I hope you may feel able to do, would be to recognize the very serious responsibility that falls upon medical men in connexion with this illness.

The responsibility will indeed be realized as heavy when the true cause of neurasthenic symptoms is grasped, and it becomes apparent how much is due to the patient's mental attitude, and how much also his demoralizing self-imprisonment may be helped or worsened by outside influences. The extreme importance of a correct diagnosis then becomes clear, and nothing is more certain than that it is the first slip that tells. Who can say what the effect of a careless opinion may be on a none too stable mental organization? Advice, for example, to be careful and not hurry for a train, when the muscle and valves of the heart are perfectly sound and some slight functional derangement alone is responsible for the symptoms. Or what mischief might not be occasioned by a meddlesome inquiry into family history eliciting the fact that some of a patient's forebears had suffered from cancer, when symptoms relating to the tongue or throat or stomach had already directed his attention to the possibility of serious organic disease? We cannot be too careful to avoid giving suggestions or hurting the susceptibilities of nervous patients, and even the most experienced and thoughtful will at times unwittingly fall into error. I remember accompanying a very depressed neurasthenic patient to consult the late Sir Andrew Clark, the kindest and most considerate of physicians; unfortunately, in giving his opinion, which was in the main most encouraging, he dropped the word "melancholia." The outcome of that visit was disastrous, entailing serious trouble all round, in which even Sir Andrew himself shared, for he was pestered for weeks with letters to know whether in using the term "melancholia" he had the idea of insanity in his mind.

In framing a diagnosis we cannot, of course, hope to be invariably right, for latent organic disease is prone to mask itself behind functional symptoms and to masquerade in a garb of pronounced neurotic character; and, on the other hand, the deceptions practised upon us by hysteria and allied functional nervous states in simulating serious lesions, is well known. But we can at least make an exhaustive examination of our patient and institute a thorough search for unequivocal physical signs and symptoms of organic disease; failing to find them, and recognizing that we have a nervous temperament to deal with, we may then give the patient the benefit of the doubt and choose treatment directed to combating the neurotic factor at work.

It may be urged that the doctor's reputation is at stake, and that if not quite certain of his ground he is justified in "hedging" by way of safeguard in the event of something turning up. But this is, to say the least, unscientific and selfish, and inconsistent with a professional man's duty towards his patient, which is, when possible, to effect a cure. In neurasthenia a hedging diagnosis may effectually block a cure. Once let us grasp the fact that neurasthenia is a definite morbid entity deserving of a prominent place in our nosological tables, to be diagnosed and treated like any other disease, and we shall see immediately that our reputations are in much greater peril in consequence of failure to effect a cure than they would be from missing a latent organic lesion. A correct diagnosis is, then, of the first importance.

DIAGNOSIS.

We employ the term "neurasthenic" in a very loose and certainly most comprehensive way. It is made to include the north and south poles and all the intermediate latitudes of functional nervous disease. Anything between the highly-strung, interesting, but irritable young lady who abhors the designation "nervous," and is grossly insulted by the slightest hint that she is hysterical when she complains of an abiding cold spot between her shoulders in her spinal column that nothing relieves, and the stupid, depressed, ever-complaining and, indeed, heart-breaking "lie-abed," a lifelong trouble to herself and her friends; anything between the intelligent, vivacious business man with a fixed and altogether exaggerated idea of the importance of a certain sensation in his head or stomach, and the distressing state of neurotic *impasse* as represented by the lifelong depressed hypochondriac, we call neurasthenic, and their name is legion. But the fact that the term is used in a loose and wide sense is only an additional reason why we should be

most careful in working out a diagnosis. Our guiding rules should be to make, if possible at our first interview, a careful search for organic mischief, and in any case to give no opinion until an exhaustive examination has been made.

A few points seem to indicate the neurotic nature of the symptoms, and to some of these I may briefly refer.

1. Many, though of course not all, neurotic pains are described as *constant*; it is said that the pain never ceases, is always present during waking hours. Organic pains are seldom so described. On close examination the admission is often made that these functional pains do occasionally cease for a time, but at the next interview the legend that the pains are constant is revived, and once more a close interrogation has to be instituted before the truth is reached; this lack of accuracy is strongly suggestive of the mental state underlying neurasthenia. Headache, for example, described as constant, is usually of this nature, and the same may be said of spinal pain and backache generally.

2. A clue may be furnished by the kind of language employed in describing symptoms, this being generally exaggerated, expansive, and florid. The neurotic refers to his pain or other abnormal sensation as ever increasing; at every visit it is worse than before—it is "appalling," "past bearing."

3. Again, we may learn much from the fact that a neurasthenic patient who comes to see us, and is both able and anxious to describe in detail every feature of his case, is nevertheless accompanied, as a rule, by some one who can and will emphasize his story further—a wife, a sister, or a sympathetic friend.

4. It is important to observe—and many neurasthenics are prepared to admit the fact, or we may obtain it from an intimate friend—that *pari passu* with the progress of the symptoms for which we are consulted there is evidence of an ever-increasing nervousness, using the term in a general sense. I think this is a valuable point, for it commonly happens that in a case of organic lesion complicated, and it may be masked, by neurasthenic symptoms, the functional aspect becomes less noticeable and the patient acquires more and more control as the serious mischief advances.

In addition we should become familiar with the special features of neurasthenic pains and other symptoms, many of which are characteristic. Just as the name of an individual will give us a clue to his nationality, so the special locality or description of a pain will furnish evidence of its origin. For example, neurotic or pseudo-angina is worse at night, excites but little real alarm in the minds of patients or friends, seldom passes into one arm alone, is accompanied by palpation, and lasts for hours. The neurotic backache is either a fixed sacral or coccygeal pain, or else is diffuse, a veritable will-o'-the-wisp in the sense that it cannot be located exactly. A headache complained of as constant and referred to the top of the head is nearly always functional and neurotic, and so on.

But no matter how suggestive the symptoms, no matter how great our experience may be, we should never content ourselves with a diagnosis arrived at in this way. A judiciously conducted inquiry and an exhaustive physical examination serve two valuable purposes: First, to set at rest the actual question whether there is organic disease, and then to convince the patient that we really and fully understand the case. If we are to treat the neurasthenic successfully we cannot do too much to gain confidence in the first instance.

TREATMENT.

Given a careful and correct diagnosis, we have next to consider the treatment to be adopted. I am bound to say at the outset of this that a personal factor enters into the successful treatment of neurasthenia that cannot be overlooked nor minimized. It calls for a combination of insight, sympathy, and firmness that all do not equally possess; and even those who do possess the power to rouse or restore the patient's confidence in his ability to combat his symptoms are not always able to exercise it with the same degree of success. In saying this I am not referring to the use of any such agency as hypnotism or suggestion, for that phase of the matter lies outside my subject to-night—I am speaking of ordinary intercourse between doctor and patient.

Next to the diagnosis based on positive and secure grounds must be placed courage to speak and act firmly, begotten of knowledge, and an eager desire to help our patient—and, may I add, confidence that the professional brother next door will say the same thing if appealed to by some dissatisfied patient who wants a definite name for his malady. Truth obliges me to add this qualification, as things are at present, for, though I would fain be the last to accuse any man unjustly, I am afraid it is undeniable that there are still in the ranks of our calling some few who will not hesitate to take advantage of the ignorance and credulity of patients and trade on the honesty of their neighbour. Such an one is, of course, not to be found amongst those whose scientific interest leads them to attend post graduate lectures—indeed, he is given to avoiding his professional brethren at all times—and what I would urge is that the growing assurance of medical men as to the nature of these neurasthenic disorders should in all cases be boldly acted upon. The more consistently this is done amongst upright practitioners the sooner will other methods—which, it will be seen, do not lead to cures—be discredited.

But to return to the patient. We must recognize that what we have to treat is not a group of symptoms, but a specific morbid state of the mind and nervous system. The well-known story of the patient who says "she cannot," the nurse who says "she will not," and the doctor who rejoins "she cannot will," puts the position in a nutshell. Therefore, as the successful treatment of neurasthenia does not lie in the treatment of symptoms, but rather in the management and correction of a mental fault, it follows that drugs are not of great assistance, though as tonics, etc., they have their place, and cannot, therefore, be entirely ignored. There are some who will argue that it is good practice to give neurasthenic symptoms a name based upon the locality to which they are referred, such as "liver," "gastric catarrh," "floating kidney," "displacement of uterus," "weakness of heart," and think it wise to treat these supposed ailments with drugs, etc., in the hope that the patient may eventually be persuaded that a cure has taken place. That is, drugs and other treatment are employed as an indirect method of suggestion, with a cheerful acceptance of the risk that they may do actual harm. This I believe to be most unsound practice, and I feel that we cannot too strongly set our faces against it.

The treatment that is attended by the greatest success, indeed the only rational line of treatment, consists of an honest and straightforward statement to the patient, dealing with the facts of the case—a statement that enters fully into its pathology and touches lightly upon the symptoms; a statement that, by its very firmness, disinterestedness, and kindliness, wins the confidence of the patient, and encourages him to think better of himself, and to make a real effort to rise above his trouble and ignore himself. The power to help and encourage our nervous invalids undoubtedly increases with experience and practice; and the sooner we begin to talk rationally to them the sooner will we acquire the art of curing them. Many a patient has returned to a doctor, it may be months or years after his first visit, the chief factor of which was a plain talk, and when asked as to his state and how the prescription suited him, has replied: "Oh, I am much better; but it was not the medicine that did me good, but what you said."

This is what may be done assuming that the patients seek advice at the beginning of the illness, before the neurasthenic symptoms are confirmed, and at a time when they are amenable to treatment, by the simple method of establishing confidence on the part of the patients in themselves and in their own ability to dominate and control the situation. The course becomes more difficult as time advances, and especially if a disquieting opinion has been offered and the patient's attention drawn by diagnosis to some definite lesion. Catchwords such as "catarrh of the stomach," "twist of the womb," stick and serve as a kind of rational peg on which to hang an entirely mythical string of non-existent symptoms. As a rule such a diagnosis is a random shot without meaning. I fear we are all too prone to give nervous symptoms a name—any name, alas! but the real one.

When the case has become confirmed, and especially when the surroundings are unfavourable and unhelpful, our difficulties are necessarily increased, and they become still greater when the patient's health has been lowered

by sleeplessness, anaemia, dyspepsia, and so on. But even then a true diagnosis and sound advice will do much, coupled with suitable remedies and change of air and scene; but the key to success still lies in the proper management of the patient's mental state. To grapple with this and the various causal factors at work requires all our tact, courage, and patience.

Many cases will, however, defy this rational line of treatment, even at the hands of the most experienced, when attempted at home. Adverse circumstances are too strong for them, and the doctor's efforts are more than counterbalanced by influences outside his control. It is then that isolation proves so valuable, with or without a course of the so-called Weir Mitchell treatment; and I feel that in bringing to a close my remarks upon the treatment of neurasthenia I cannot do better than give you a brief account of my own experience, extending now over many years, of the Weir Mitchell treatment.

This treatment, as you are aware, is a combination of isolation away from home, rest in bed, overfeeding, massage, and electricity. The one item in this list likely to produce a lasting mental effect is the isolation; and although Weir Mitchell himself incidentally speaks of this as giving a valuable opportunity for "moral suasion," he lays no great stress upon it from that point of view, while some of his followers openly deprecate "preaching," and insist on relying solely on the physical processes.

The great French physician, Dejérine, on the other hand, has evolved a system in which isolation with rest in bed and what he calls "persuasion" play the principal parts; overfeeding is used only in cases of emaciation, massage and electricity are discarded. Dejérine rejects suggestion as formerly used by Charcot and others because it in no way enlightens the patient's intelligence, nor does it help him to exercise his own will; the "persuasion" which he substitutes for suggestion means such rational explanation and demonstration to the patient as will communicate enough understanding of the matter to enable him to co-operate intelligently in his own cure.

My own experience, independently worked out and extending now over many years, goes to show that the point of chief importance is mental treatment administered under the most favourable conditions, of which the first essential is isolation under the doctor's control. The mental treatment is, in fact, a sort of education with encouragement. The plan adopted should not be too rigid; each case needs to be separately considered and treated on its own merits—one will require stern insistence, another gentle coaxing. By countless varying methods the treatment is always directed to the one end of leading the patient away from the constricted, self-centred attitude of mind in which attention is absorbed in narrow personal feelings, and substituting for this a roused or restored interest in wider affairs of life, which will in turn endow him with a new and larger and perfectly healthy self. To this main object the various helps of rest, over-feeding, "passive exercise" or massage, electricity, etc., are, when used at all, regarded only as subordinate accessories. And I may add, in conclusion, that the number of lasting cures secured in this way year by year strengthens my conviction that the theory is true and the practice sound.

Clinical Remarks
ON
TUBERCULOUS CHLOROSIS.

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WHEN we meet with a case which presents in a more or less marked degree all the ordinary appearances of chlorosis, and which yet on examination of the blood reveals the number of red corpuscles and the percentage of haemoglobin to be practically normal, we are very likely to find in it a history of past or present tuberculous disease. This condition, often occurring in young women, is one which long ago Trousseau recognized and called false chlorosis or tuberculous anaemia; and although in recent times, when blood examination has become more of a routine procedure, the co-existence in tuberculous disease of an anaemic appearance with a practically normal blood count is quite recognized, it seems to me that in cases apparently of chlorosis this possible association of tuberculous disease often passes for long unrecognized. Inasmuch as the recognition of such cases is important from the points of view alike of diagnosis, etiology, pathology, and treatment, I believe that the following are well worth recording.

CASE I.

A. H., aged 16, a French polisher, was admitted to Ward 31, April 9th, 1907, as a case of chlorosis. She complained of shortness of breath, palpitation, and swelling of the ankles, and stated that she had been ill for three weeks.

History.

Her family history was not very good. Her father had died, aged 35, from Bright's disease; her mother is alive and well. Of a family of four, two brothers had died, causes unknown; one sister was alive and well. Her surroundings at home seemed to be satisfactory; at work, however, she had been in a room with many others, and the air, she said, got very close. As regards previous illness, she gave a history only of suppurating glands in the neck at the age of 6 or 7. They were quite cicatrized. Her present illness, she said, began about three weeks before admission. With some pain and discomfort in the feet she noticed swelling, which the doctor told her was due to dropsy. The pain gradually ceased, but the swelling remained until her admission. She also noticed palpitation and breathlessness, and stated that she had been getting thinner.

State on Admission.

Height 4 ft. 10 in., weight 6 st. 3 lb. Her development and muscularity were poor. Some oedema of both ankles was present, and her appearance was one of pallor and extreme anaemia. The temperature showed slight irregularity.

Circulatory System.—The pulse was usually about 90 or 100. She had complained of shortness of breath, faintness, and palpitation. As regards physical signs, little that was abnormal could be detected. The heart was not markedly enlarged, the sounds were all closed, and, in spite of her pallor, the *bruit de diable* was not well marked. The red blood corpuscles numbered 5,200,000, haemoglobin 70 per cent., white corpuscles 7,187. A differential count gives polymorphs 57 per cent, lymphocytes 39 per cent., basophiles 3 per cent., eosinophiles 1 per cent.; the opsonic index was 0.9.

Respiratory System.—The patient had no cough, but gave a history of coughs coming on from time to time. Some weeks earlier the cough was very troublesome, and she suffered from pain in the chest on coughing and breathing. On careful examination of the lungs, slight shrinking of the left apex with a slightly impaired percussion note was made out. On auscultation, nothing was detected except slight harshening of the breath sounds. With the screen, the x rays afforded corroboration of the physical signs, for the left apex lighted up much less distinctly on inspiration than did the right. The urine was pale in colour, showing no trace of urobilin; and as regards the integumentary system, all that had to be noted was that there existed slight oedema of both ankles.

In this patient, then, we had presented all the appearances of chlorosis, and yet a practically normal blood count. The differential count of the white corpuscles showed, as was to be expected, a relative increase of lymphocytes, and the opsonic index, for the estimation of which I have to thank Dr. Ian Stewart, was within normal limits. Dr. Ian Stewart also tested in this patient the effect of tuberculin inoculation on the opsonic index, and found a rise on the third day, without any previous fall. All this may be regarded as indicating that there is at present no active tuberculous mischief going on. But the evidence of the old tuberculous neck glands, and the condition of the left apex undoubtedly point to the presence of tuberculous disease, whilst the occurrence from time to time of cough, expectoration, and chest pain, make this all the more manifest. The case is therefore one of tuberculous chlorosis.

CASE II.

Constance H., aged 18, domestic servant, was admitted to Ward 33, on December 18th, 1905, complaining of breathlessness, palpitation, stomach pain, and swelling of the legs, and stating that she had been ailing from this for the last two years.

History.

Her family history was not very good; her father died of Bright's disease, her mother in childbed. She had one sister alive and healthy, and one brother healthy; but of her other three brothers, one had Bright's disease, another had some form of paralysis, and another had died from consumption. She had been in service for three years, and as regards food and home surroundings had been well placed.