of menstrual epilepsy. It is now a matter of ancient history, but perhaps worth while recalling, that it was for such cases he recommended the use of bromide of potassium. The use of that drug was subsequently extended to other cases of epilepsy, and we all know with what splendid results. Since then, its use has become widely spread to other cases, often wisely and seasonably, but, on the other hand, too often unwisely and unseasonably. The lungs often afford evidence of the effect of the nîsus upon distant organs. I have seen cases of true menstrual asthma, that is, asthma coincident with the nîsus, passing off with the establishment of the period, and absent in the interval. In persons suffering from a bronchitis, more or less chronic, interferences, if less conspicuous, are infinitely more common; just, indeed, as bronchitis is an infinitely more common disease than asthma. If a bronchitic case, in whom the expectoration is easy and copious, and thick, be exposed to a chill, and the expectoration immediately became scanty and viscid and difficult, we readily accept the view that cold has been caught. We find no difficulty in associating the change of symptoms with a change in the circulation of the mucous membrane. What difficulty, then, is there in conceiving that the circulatory disturbance, attending the nîsus, should disturb the already ill-balanced circulation of the bronchial mucous membrane, in a superior degree to that of other parts whose circulation is well-balanced. If the associated disorders be not very distinctly and directly connected with the state of the circulation, we should be more chary of direct interference; that is to say, more reluctant to attempt to precipitate the advent of the menses.

What applies to the treatment of such cases, applies also to that of the irregularities of a later period, and the attendant anæmia or chlor-anæmia.

It is, doubtless, of advantage that we should be able to take a wide and comprehensive view of any case; that we should plant our therapeutics upon a broad basis, and so avoid trying to adapt our remedies to every little turn and phase. We thus may hope to avoid a tinkering and feeble treatment; to avoid grasping at the shadow, and missing the substance.

But, it is of equal importance that we should retain the power, and, on occasion, exercise it, of disintegrating a case into its compound parts. For it happens, from time to time, that what seems only a part may yet be greater than the whole.

It is especially necessary to bear this in mind, in the case of any disorder for which we have a reputed specific. In the anæmia of girls, both theory and experience combine to show that we have something approaching to a specific in the preparations of iron; but they do not always succeed. It is very likely that these failures may appear, to a consultant, to be more numerous than they do to others. A considerable proportion of the cases which come under their notice are, what we may call, therapeutic misfits—cases in which the diagnosis of the disease, as a whole, has been correct, and the treatment in full accordance with established rules. In such cases it is that we ought to cease to regard the disease as a whole, and look at the details of its compound parts. Two recent examples occur to me; in one, the patient had failed to respond to a routine-treatment skillfully adjusted. On analysis of the symptoms, the most striking special feature was the rapidity of the heart's action, and the deficiency of arterial tension. Treatment, mainly by belladonna, regulated these, and general relief was procured. In another case, which, indeed, has been before me since the lecture was commenced, a well-marked chlorosis had not only not yielded to iron-treatment, but had, under it, become markedly worse. Analysis of this case seemed to show that its special feature was chronic gastric catarrh. Treatment founded on this view, and mainly by ipecacuanha, was followed by immediate and progressive improvement, which has proved permanent. There is nothing very mysterious in such cases. Assuming that anæmia and chlorosis are expressions of the fact that the blood lost at the periods has not been made up, they are very clear.

Without entering into any vexed question as to where new red corpuscles originate, we shall all most likely agree that the integrity of various parts is necessary to their completion. If so, it necessarily follows that imperfection in any one of these parts may be responsible for their insufficient reproduction. Overfeeding, underfeeding, over-exercise, under-exercise, insufficient air, undue exposure, late hours, or too much bed, too much brain-work, perhaps too little, too rapid growth, any one or more of these may prevent the restoration of the blood. They may also prevent that normal plethora of which the first period is the normal cure.

The brunt of any of these unhealthy influences may fall upon any one organ rather than on another. The practical inference from these considerations is that we should, at all events, delay interference in cases of apparently retarded menstruation, or of subsequently de-

veloped anæmia, till we have satisfied ourselves, by minute inquiry, that such causes have been removed; and until we have, at least, made a vigorous effort to rectify any functional aberration of the viscera.

As regards the last class of cases, those in which the girl is not only backward in development, but also in an indifferent state of health, no doubt we do see instances of improvement following, and sometimes apparently due to, menstruation. In some such, it may be that its occurrence is an indication that the developmental forces have made a spring, of which the fresh result and sign is the period. In other cases, it may be that the sudden call upon the blood-forming organs has roused them to a response, a circumstance which, as we have seen reason to believe, may happen from the artificial removal of a portion of blood. But, if we free ourselves from a blind belief in menstruation as a sort of physiological fetish, we see other cases; cases in which the patient is precipitated by a first menstruation, or by two or three repetitions, not into a better, but into a worse state of health, and often into phthisis. One such case of phthisis has come under my notice within the last few weeks. I am quite willing to admit that this is rather a question of interpretation than of fact. No doubt, many who would admit the existence of such a case as the last, and the sequence of events, would regard it from a different point of view. They would consider, not that the menstruation had killed the child, but that a case on which such a beneficial act had failed to act beneficially, was intrinsically hopeless and incurable.

Well, I ask you to study this subject for yourselves; you have plenty of opportunities. Study it dispassionately; lay aside the too common prepossession that a moderate discharge must necessarily be beneficial, and cannot possibly be injurious. Ascertain minutely, and consider, without prejudice, the primary and secondary effects of each such discharge upon the individual patient. Compare these with the well ascertained effects of artificial, or of other natural hemorrhages, large and small. If you will do this, I think that some of you will come to the conclusion that, if I have now overstated the case on one side, you have in your own minds been accustomed to overstate it on the other.

CLINICAL LECTURES ON THE UTERINE NEUROSES.

Delivered at University College Hospital.

By GRAILY HEWITT, M.D., F.R.C.P.,

Professor of Obstetric Medicine, University College; Obstetric Physician to the Hospital.

LECTURE I.

GENTLEMEN,—The subject with which it is proposed now to deal, is the "neuroses of the uterus."

As a preliminary, it is necessary to define the term "uterine neurosis."

It may be considered impossible, with the knowledge in our possession, to define, in a conclusive and accurate manner, what constitutes a uterine neurosis. This circumstance, however, is an argument for a discussion of the subject, and for the necessity of an endeavour to arrive at some satisfactory generalisation. At the outset, we are met with the difficulty of deciding how far certain symptoms have their origin in a morbid condition of (a) the nervous centres, (b) the uterus, or (c) the ovaries, or (d) of abnormal conditions of two or more of these elements in co-existence and combination. The facts which are adducible have led different observers to different conclusions, as to the primary or principal and dominant pathological factor. For some, the uterine neuroses are merely evidence of a constitutional or general disturbance. For others, the uterus is the organ affected. And in the estimation of a third set of opinions, the ovaries are the *fons et origo mali*.

There can be little doubt that the mistakes which have been made, and the difficulties which have been encountered in dealing with this really difficult subject, have arisen principally from a too exclusive attention to one or other of the elements, the general and the particular; the general represented by those who regard the uterus and ovaries, as dominated by the other organs of the body; and the particular by those who neglect the general, and explain everything by the local disorder of the generative organs (uterus or ovary).

Careful clinical study of cases leads to the conviction that most cases are of a very mixed kind, and that local alteration or disease is rarely witnessed, unless in conjunction with a more general one. Those diseases which may be included in the term "uterine neuroses," are, as can be shown by anatomising them, very forcible evidences of

the truth of this generalisation. A general feebleness is in many instances the basis, as well as the accompaniment of more strictly local pathological changes. The nervous affections of the uterus are, it may be said, in a fair way of becoming better understood, in consequence of the more exact attention which has recently been given by Dr. Weir Mitchell, Dr. Gowers, and other neuro-pathologists to the condition of the nutrition of the nervous centres in cases of nervous disease, a kind of investigation which bids fair to throw a flood of light on a previously obscure subject.

Seeing that, as above stated, the study of the neuroses of the uterus implies a careful study of the condition of the nervous centres, which constitute a part of the apparatus whose action is disturbed, it will be at once seen that the general "feebleness" or weakness, which precedes and mostly accompanies, and is an essential part of uterine neuroses, is likely, nay certain, to be only another term for defective nutrition of the nerve centres.

The so-called "functional" nervous diseases can be shown to be largely due to a tangible anatomical alteration of the nerve-centres, namely, impaired nutrition. This explanation offers a substantial confirmation of the accuracy of certain conclusions which clinical experience and observation had led me to adopt in speaking of the general interpretation of hysterical phenomena, and which will be found described in the fourth edition of my work on *Diseases of Women*, p. 559, in the chapters devoted to the consideration of the hystero-neuroses, as the following quotation will show. "It is extremely probable that the predisposing condition is always a state of defective nutrition of the nerve-centres, for the individuals affected, for the most part, present other strong evidence of general feebleness, weakness, and want of power. Moreover, there is usually a history of previous inappetency and such quantitative defects in the dietary as would be likely to give rise to a starved condition of the frame generally."

As regards the respective clinical importance of the pathological conditions of the uterus and the ovary, the numerous and brilliant results obtained by the surgical removal of the "uterine appendages," in relieving patients of certain troublesome symptoms, appear to threaten to have the effect of leading to an undervaluation of the importance of the uterine factor. That a neurosis, apparently uterine, is removed, or removable, by these mutilating (I use the word in no offensive sense) operations, does not, of course, prove that such operations are necessary for the cure of the neurosis. No doubt there are cases in which the neurosis is of uterine origin, but, from its stubbornness and misery-producing character, renders the operation in question justifiable. And I am not, of course, contesting the propriety of ovarian extirpation when the ovaries are themselves so diseased as to be useless for functional purposes.

The uterus is subordinate to the ovaries in the sense that it apparently derives its power of irritating the system from the ovaries. Functionally, the uterus comes to an end when the ovaries are destroyed or removed; but it is certain that the uterus is endowed with a high, and, in a sense, an independent organisation, and that various pathological conditions of the uterus have great disturbing capabilities, and that these disturbances may be present with a healthy condition of the ovaries.

The uterus is, in a state of health, but slightly sensitive to the touch, and cutting operations, such as repair of lacerations of the cervix, are even sometimes performed without the aid of anaesthesia. The lining of the uterus appears to be, however, somewhat sensitive in a state of health, and particularly at the fundus uteri, the touch of the point of the uterine sound usually occasions a certain degree of pain. It is stated by some authorities that the internal os uteri is very sensitive, but this is not my experience in cases where the uterus is in a healthy condition; but the uterus manifests great sensitiveness when in a state of acute congestion, a condition rarely witnessed, I believe, except in association with marked flexion, and, under such circumstances, the slightest touch occasions severe pain. The lining of the uterus seems to be the part which exhibits this undue sensitiveness more particularly, but it is usually more intense at one part than at another; the internal os uteri is often the most sensitive part in cases of congestion. Under these circumstances, it is not uncommon, also, to meet with considerable sensitiveness of the ostium vaginæ, due in part to the fact that the congestion affects the vessels at the ostium vaginæ, in part, possibly, to other causes. Undue sensitiveness of the uterus to the touch is also liable to be observed when the organ is in a state of chronic congestion, and these chronic changes in the walls of the uterus, or its lining, metritis or endo-metritis, or both, would be considered by many pathologists to be present. The blood-vessels of the uterus, including its lining, are, in such cases, filled with blood to an undue extent, and the pain is due to pressure

on the nerves resulting from the engorgement, or from the exudation of fluid between the tissues, and, later on, when the congestion is chronic, resulting from proliferation of the connective tissue, whereby the bulk is increased, and the nerve-compression intensified.

Coupled usually, as I believe, with undue sensitiveness to touch, the uterus sometimes evinces extreme sensitiveness in a reflex way, the result being the appearance of reflex phenomena. To these reflex phenomena I wish to direct your particular attention. They are of the greatest possible interest, and their nature has excited, at all times, great discussion. These are the hystero-neuroses, concerning which, as already stated, diverse ideas are entertained, some believing they depend on ovarian, others on uterine, irritation. At first sight, the term hystero-neurosis would appear to imply a uterine origin of the phenomena in question; but the words hysteria or hysterical are also used by some, who have no idea of uterine origin at all, but consider the ovary as the source of irritation.

The word "hysteria," it may be here remarked, is one which has been very vaguely employed. Hysteria means for some an intentional simulation of disease, a sort of malingering; for others, it is a morbid emotionality. Some appear to regard it as a kind of repressed or excessive sexual manifestation; for others, it is presence of symptoms which do not indicate organic disease, but which may simulate such disease; while for many others, including M. Charcot, of Paris, it is a disease having very marked and characteristic signs and symptoms, and not by any means limited to the female sex.

There are, at all events, two principal series of cases to which, in my humble judgment, the term hystero-neurosis properly applies, and which clinical observation of actual cases has led me to set down as clearly hystero-neuroses—that is, nervous disturbances excited in a reflex way by the uterus; namely, *a*, nausea or vomiting associated with uterine disease; and *b*, liability to what are termed hysterical attacks of the more ordinary kind. There are some other instances of reflex symptoms which might be cited, but, at present, I wish to direct attention to the two sets of cases above mentioned.

The designation hystero-neurosis, which I propose to employ, is one suggested by Engelmann. Under it will be included such reflex phenomena as appear to be produced by means of an irritation originating in the uterus. The wider question, as to what is "hysteria," is a distinct question, and will be incidentally considered later on.

A. NAUSEA OR VOMITING, OF UTERINE ORIGIN.

It is well known that one of the common symptoms of the presence of pregnancy is nausea or vomiting, which symptoms are invariably ascribed to the changes produced by pregnancy in the uterus, although as to the precise manner in which the gravid uterus acts as the excitator of the sickness, there is no universally accepted explanation. It is generally believed, however, that the sickness is a reflex manifestation of irritation in the uterus.

Further, it is known that, in the non-gravid state, nausea and vomiting are occasionally witnessed in cases where the uterus is in a morbid condition; and the term "uterine sickness" is employed to designate it, implying the admission that the sickness is the result of an irritation in the uterus. Respecting this latter class of cases, however, there is less unanimity in regard to the uterine factor; some authorities entertaining the belief that the sickness depends, in such cases, on an irritation in the ovaries. Further, it is undoubted that an irritation in the ovary may give rise to sickness; and those who would argue for an ovarian source might, with some show of reason, adduce the familiar fact of a blow or injury of the testis producing sickness in the male, as an analogical argument for the presence of ovarian disease as a probable source of vomiting in the female sex. But, although it is doubtless true that marked sickness may be traced to the ovary, rather than to the uterus, in certain cases, experience strongly favours the view that the uterus is the primary irritating agent in most instances. The presence of sensitiveness to the touch, is one of the tests by which this question would be determined in a given case; for, assuming that this sickness was a reflex sickness, due either to the ovary or the uterus, the presence of tenderness in the ovary, and absence of tenderness in the uterus, would undoubtedly be an argument for the ovarian source of the reflex symptoms, and *vice versa*. My own experience is, that the reflex symptom now under discussion is almost invariably associated with, and, I believe, dependent upon, abnormal conditions of the uterus, consisting of undue softness, congestion, and alteration of shape—all more or less associated. I have observed the conjunction of these factors, so very common in such cases, as to show, in my opinion, that there is a very decided causal relation between them and the reflex symptom, vomiting; while the evidence obtainable has been, so far as the ovary is concerned, to give a negative to the idea that the sickness was of ovarian origin.

The uterus is not always soft. It presents a condition varying in different cases. When the case is of recent origin, the uterus is commonly soft, and quite wanting in resistance. There is, in most cases, congestion, which is usually of a subacute or of a chronic character; there is sometimes enlargement, when the case has assumed a chronic character, this hypertrophy affecting often the whole organ. The flexion is generally well marked, and of the second or third degree. In some cases, the uterus has become unduly hard; the organ resists an attempt to straighten it, which resistance is due to the hypertrophic hardened state of the uterine walls. Moreover, the uterus, as a whole, is usually less movable than usual, and is altogether nearer the pelvic floor than it should be; indeed, in cases of retroflexion, and in certain cases of antelexion, it may be found to be separated from the coccyx by hardly more than a quarter of an inch.

I have met with a few instances in which severe vomiting was evidently due to the presence of small fibroid growths in the uterine parietes, and this it is important to bear in mind in attempting any generalisation on the subject; but, in proportion to the other causes mentioned, this is a cause of severe vomiting which is comparatively rare.

Attentive observation of many of these cases led me to observe the great effect of movements of the body, of exertions, of physical efforts such as would be likely to produce a downward pressure on the uterus, and thus calculated to aggravate, or increase, or produce a physical pushing downwards of the uterine fundus; and when it was found that, almost invariably, the patient suffered from increase of sickness, in consequence of such exertions or movements, when it was found that increase of such movements did actually produce at one and the same time sickness and increased flexion or displacement of the uterus, it was reasonable to conclude that the increase in the degree of the flexion was an important factor in the production of the sickness.

The most conclusive argument adducible in regard to the action of displacement of the uterus in giving rise to vomiting, is the cessation of the sickness observed to follow the partial or complete restoration of the uterus to a more normal position. In severe cases, the patient would, under such circumstances, usually be made to rest in bed, at the same time that other measures were being taken to give relief by a mechanical treatment of the displaced uterus. Here, it might be fairly urged—and the argument has been freely used—that the rest in the recumbent position is the real healing agent. But there have been many instances which have fallen under my notice, in which the patient, suffering from troublesome nausea, due, as I believed, to a flexion and displacement, has been treated by a suitable pessary, and allowed to go about as usual, and in which, nevertheless, the sickness has forthwith ceased. In these latter cases, in fact, the only remedial measure was mechanical support to the uterus, with complete freedom of locomotion of the body generally, and there could be no other explanation of the result than the one which is here given.

I will now give two cases illustrative of some of the foregoing remarks. In the first case, the patient was treated in the hospital; the second case was treated as an out-patient. In the first case, the element "absolute rest," formed an important part of the treatment. In the second case, the patient was going about as usual, and the pessary was the only remedial agent. As a test of the therapeutic value of the means employed, the latter of these two cases seems to be a very complete one.

CASE I.—Severe Nausea and Vomiting, Previous Hysterical Attacks.—M. H., was admitted an in-patient on April 22nd, 1882. She was single; a dressmaker. The catamenia were at first regular, but became, at the age of 18, irregular, and had since been very painful. She passed, sometimes, clots of the size of a marble. She had had sick headache since the age of 18, she had had nausea, frequently followed by vomiting, for some time; worst at the periods. For four years she had been very "nervous," and until nine months ago had occasional hysterical fits, with laughing or crying, coming a day or two before periods; at which time she also had much headache. She never lost her senses or bit her tongue. Occasionally, after the periods, micturition was impossible. For two years she had been unable to follow her occupation. For four months she had been unable to take solid food. During the last year she had taken little food, and retained less, on account of constant vomiting.

On April 24th she was thin and wasted. Since admission, the use of a catheter had been necessary. The hypogastrium was very sensitive. On April 27th, under ether, an examination was made. The uterus was acutely antelexed, and in the third degree of posterior rotation, so that the os looked directly upwards to the brim. By the sound the position was easily altered. A cradle pessary was introduced. Brand's essence of beef, and brandy were given. May 2nd.

She had pain. There was retching this morning. The catheter was required. Albumen and pus were present in the urine. May 4th. There was no retching. Urine was passed naturally. Her weight was 6 st. 1½ lbs. May 8th. She had retching. The catheter was required yesterday. May 12th. There was no sickness. She took bread and milk for the first time yesterday. She had flatulence. May 15th. She was much improved altogether. There was no difficulty with the urine; no albumen. May 18th. Her weight was 6 st. 5½ lbs. She was allowed to get up a little. May 20th. She felt very weak when upright. She had retching once yesterday. May 22nd. There was no nausea. May 24th. She had nausea. May 25th. She had much nausea this morning. Her weight was 6 st. 7½ lbs. There was no albumen, but a trace of sugar in the urine. May 27th. She had not felt sick since yesterday. May 30th. She was feeling sick to-day. Her period was expected. She had headache. June 5th. She felt better; headache was less. The period had not arrived yet. June 8th. Her weight was 6 st. 9 lbs. June 9th. The period arrived. June 10th. The catamenia were accompanied with much pain in the back. She had nausea, but no vomiting. June 14th. The period was over; it lasted four days. She had indigestion and flatulence. June 15th. Her weight was 6 st. 7 lbs (a loss of 2 lbs. in a week). Examination showed the uterus in a better position, but the posterior rotation was considerable; a different pessary was required. On June 19th and 21st she had nausea. June 22nd. She felt very sick. June 26th. A new pessary was introduced, which was intended to lessen the degree of posterior rotation—a combined Hodge and cradle pessary. July 6th. The patient was a good deal better. She had no vomiting, but nausea the first thing in the morning. July 10th. Menstruation began at the proper time. July 14th. The period had been much better. She had no sickness; she took her food well, and had had but little pains during the period. July 23rd. Last night she had to walk up-stairs, in order to make room for an emergency case. This was followed by abdominal pain and by nausea. She vomited once, and had nausea. July 24th. The pain was not gone; there was no nausea. July 25th. She had no pain. She was now going to the convalescent home.

CASE II. Obstinate long continued Vomiting; Acute Antelexion.—S. B., aged 31, came under my care June 11th, 1883. Two years before (February 11th, 1881), Dr. H. Sutherland read a statement of her case before the Clinical Society of London, entitled, "a case of chronic vomiting in which no food was taken, except koumiss, for sixteen months." She had been under his care as a dispensary patient for five years, and, for one year and seven months, had suffered from vomiting, at first fortnightly, then much more frequently, always once, but sometimes five or six times a day. Every known remedy had been tried without effect. All attempts to cure the case by dieting had failed; the patient could keep nothing in the stomach as food but koumiss, which she took for sixteen months. There was no sign of disease of the stomach, and no cachexia or constitutional symptoms. She occasionally became much depressed, suicidal symptoms being at times developed.

The foregoing is an abstract of Dr. Sutherland's report. He also stated that his object in bringing the case forward, was to elicit suggestions as to the treatment. Having seen a report of the case, I wrote to Dr. Sutherland, requesting him to allow me to see the patient. The result of my offer was that, on June 11th, 1883, two years after the case was read at the Clinical Society, she came under my care. She stated that the sickness began to be troublesome after a very severe illness, consisting of a throat affection, but that she had had occasional sickness four years previously. Since the date of Dr. Sutherland's report, she had been much the same as regards sickness. She had still continued the koumiss, taking daily one or two pints, and also taking about two bottles of brandy in a week. The sickness always occurred in the early morning, and often the last thing at night. During the day it followed every attempt to eat. The vomiting was always worse at catamenial periods. She suffered a great deal of pain at the periods.

Her age now (June 11, 1883) was 31; she was a dressmaker. It appeared that she had never been in the habit of eating meat; even as a child she disliked it, and avoided taking it.

On examination, I found that the uterus was acutely antelexed, and occupying a somewhat abnormal position, as if pushed away towards the back and right side of the pelvis. The sound could be fully introduced.

June 13th. The patient was more sick, after use of the sound. To-day a cradle-pessary was introduced, which acted in such a way as to raise the fundus to a certain extent, and prevent further descent of the fundus when the patient was in upright position.

June 15th. Sickness was less. The sound was used, and the uterus

straightened. The introduction of the sound was difficult, the canal being apparently tortuous.

June 19th. The catamenia began three days ago, and were still continuing. The sickness, this period, was much less than last time. She had only been sick once in the morning. The pains were also much less, and the quantity reduced. Her diet was still koumiss and brandy.

June 23rd. The period was just over. The quantity was less. She was sick twice on June 21st. She felt better. A metallic dilator was used. June 26th. She was better. She was ordered to try yolk of egg, lightly boiled. June 27th. There was no sickness after the egg. June 28th. She had sickness after an egg. June 29th. The dilator was again employed. The pessary remained. July 4th. She had taken an egg most days, also some juice of rump steak, also koumiss and brandy. She had sickness in the morning, only one day excepted, when she was sick twice.

July 17th. She had for the last ten days taken portions of beef steak, and bread and milk twice a day, without sickness, but was always sick after the first taking of food in the morning. The dilator was now employed twice a week.

October 16th. Since last report, she had occasional dilatation. She was still wearing the pessary. The sickness occurred only once a day in the early morning. She left off the koumiss two months ago. She took now beef (about a quarter of a pound daily), bread, biscuit, jam, etc. She felt stronger. The periods were much less painful than formerly, and lasted five days, instead of ten; and she had no more sickness now at the periods than at other times. November 20th. Last week there was recurrence of sickness, and she had pain in the back. The pessary was found to be pressing unduly; it was altered. December 4th. She was very much better during the last week.

December, 1885. Since the last report, now two years ago, the patient has visited me from time to time. About six months ago, the pessary was removed, but it was found that the sickness returned to such an extent that its use was shortly afterwards resumed. She has had occasional bronchitis, and is not very strong; but the principal symptom, the sickness, has been practically abolished. She is sick in the morning after the first meal, but takes ordinary food without difficulty during the rest of the day. For the last month, the pessary has been discontinued, and without bad effect, the sickness not having returned, as was the case after the first removal of the support.

The patient has had the advantage of Dr. Sutherland's treatment during the time she has been under my notice, and is still under our joint observation.

IS THERE ANY CONNECTION BETWEEN THE (SO-CALLED) ALBUMINURIA OF ADOLESCENCE AND A GOUTY INHERITANCE?

Read at a Meeting of the Border Counties Branch.

By STEWART LOCKIE, M.D.,
Physician to the Cumberland Infirmary.

I HAVE written this short communication, not for the purpose of giving a categorical answer to the question which forms its title, but more with the object of eliciting information, and in the hope that the experience of others may assist in coming to a definite conclusion. So far as my own cases go, they support strongly an affirmative answer; but they are perhaps too limited in number to render it safe to enunciate a generalisation on the subject.

I have been acquainted with this so-called functional or dynamic affection (for cases of organic disease are excluded from consideration) ever since Dr. Dukes published his paper on the subject in the BRITISH MEDICAL JOURNAL for November 30th, 1878. Dr. Moxon and Sir William Gull had previously drawn attention to the ailment, and since then it has been dealt with by others; notably, by Dr. Saundby, Mr. Carter, and Sir Andrew Clark. The great characteristic seems to me to be the rapidity with which the albumen disappears, when the patient is confined to bed and kept on a milk-diet, and the return of the albumen when he is allowed to rise and resume his ordinary diet. I have never observed any oedema, nor great diminution in the amount of urine. Headache is usually the principal symptom of which complaint is made. I narrate the following cases. They are not in chronological order.

CASE I.—G. H., now aged 15½ years. In 1881 and 1882, I had been repeatedly consulted about this lad, on account of headache, more or less persistent; and on one occasion attacks of epistaxis were reported. The tongue was usually clean, and, though repeatedly looked for, no albumen was found in the urine. On October 22nd, 1883, albumen¹

was for the first time detected, to the extent of one-eighth; the complaint was still of headache, and the appetite was impaired. He was put to bed, and had milk-diet. On the 25th, the albumen had disappeared, and also the headache. On November 1st, there were morning headache, and a trace of albumen; the next day, the albumen had disappeared, and remained absent on November 9th. This lad soon afterwards returned to a public school, and was not constantly under observation. I saw him, however, occasionally. It was found that whenever he returned to this school, where the work was hard, he failed in health, the albumen returning; and at last it was deemed advisable that he should remain at home, working less hard, and on a restricted diet. On June 28th, 1884, the urine contained one-sixth of albumen and a small quantity of sugar. By July 16th the albumen was reduced to a trace, but it continued present in small quantity every time the urine was examined until June 6th of the following year, when it was absent. On four occasions since, it has been examined, and the first three times was free from albumen; on the last, however, a small quantity was present, though the patient had been feeling quite well for some time. This lad's maternal grandmother has well marked chronic gout, and gouty eczema. His mother also has traces of a gouty constitution.

CASE II.—A. B., aged 22, an undergraduate at Cambridge, came under my care on March 24th, 1885, complaining of sore-throat. He had travelled from Cambridge to London, and thence to Carlisle, a few days before, and thought he had caught cold. He had not, however, been very well for some weeks before leaving Cambridge, feeling unable for much mental work. Since his return home, he had been languid, disinclined for exertion, excessively irritable, heavy looking, and apparently, at times, at a loss for words when speaking. On examination, there was very slight follicular sore-throat, and, a day or two afterwards, some enlargement of glands in the sterno-mastoid region. The temperature was normal; the pulse quiet; the complexion "muddy"; the appetite impaired; and the tongue furred. Under treatment, the sore-throat and enlarged glands soon became well, but, otherwise, the patient's condition was unaltered. In consequence, on April 1st, the urine was examined. It was found to be turbid from amorphous urates, of specific gravity 1040, containing one-sixth of albumen, but no sugar nor tube-casts. The amount passed was about two pints in twenty-four hours. He was ordered to remain in bed, and to have exclusive milk-diet. By April 6th, the albumen was reduced to a trace, and, by the 8th, had disappeared. On the 10th, the albumen still continuing absent, bread, rice, and chicken-broth were allowed, in addition to milk; and, in a few days more, white fish. On the 17th, the patient was allowed to leave his bed. Early in the morning of the 18th, he awoke with pain in the left wrist. When seen, the wrist was swollen, very tender and painful; there was no redness; the swelling extended over the metacarpus. The temperature was normal; the urine faintly acid, containing no albumen. A diagnosis of gout was arrived at, and treatment ordered accordingly. Exclusive milk-diet was resumed. On the 19th, the wrist was less painful; the pulse was quickened and very tense; the temperature remained normal; the urine contained a small quantity of albumen. On the 20th, the urine was still slightly albuminous, the pulse much less tense, and the wrist less painful; there was slight oedema over the metacarpus. On the 21st, the albumen had disappeared, and the symptoms of gout were rapidly subsiding. On the 22nd, there was no pain, and scarcely any swelling of the wrist. During the following three weeks, the urine was repeatedly examined, and again on October 19th, 20th, and 22nd; on each occasion, albumen was absent. It is almost needless, in this case, to inquire for a gouty family history, as the patient himself exhibited unmistakable symptoms of the disease. The history is, however, not wanting. The patient's maternal grandfather and grand-uncle suffered from gout; his paternal grandmother has nodose phalangeal joints, and, at present, at the age of 90, has eczema of the fore-arms, which, I doubt not, is of a gouty nature.

CASE III.—A. G., a girl aged 17, came under my notice in the end of August last, complaining of a slightly painful feeling of oppression in the occipital region. After a few days, a tonic having failed to relieve, the urine was examined, and found to contain two-sevenths of albumen; a single epithelial cast was seen, under the microscope. She was sent to bed, and an exclusive milk-diet given. The next day, the albumen had absolutely disappeared, and continued absent so long as she was under close observation. After the first few days, the patient was allowed to get up, the diet being, however, somewhat restricted. On October 11th, there was a return of albumen; she was again sent to bed, and the albumen again disappeared. The patient resides at a distance from me, but I have the urine sent to me from time to time. I find that albumen is generally present when the patient is up and moving about. This girl inherits a gouty predisposition through her

¹ I make no pretensions to have accurately estimated the amount of albumen, and merely speak of the proportion which the deposit bore to the whole column of urine in the test-tube.