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LECTURE

ON THE

TREATMENT of WHITE SWELLING.

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IN a former lecture, Gentlemen, (vide LANCET, No. 609, page 174, and No. 611, page 214,) we passed in review the treatment applicable to white swellings in the acute stage, and we laid down rules for the employment of leeches and compression during the chronic stage. It now remains for us to run through the principal local means, whether revulsive or irritant, which are employed to aid the resolution. These are naturally divided into two series; viz., local means and internal remedies.

LOCAL MEANS.—These are numerous, and may be arranged under the following heads:—1st. Mineral baths. 2nd. Douches. 3rd. Medicated frictions. 4th. Rubefacients. 5th. Blisters. 6th. The Flying Caутery. 7th. Moxas; and 8th. The Seton.

1st. Mineral Baths.—Day after day, in despair of benefit from other treatment, we see patients affected with white swelling go to Barèges, Plombières, or elsewhere, and it certainly would appear that in some cases good effects have been obtained from local baths of these mineral waters: unfortunately, however, no other remedy perhaps has been employed so empirically. If we consult the reports annually made on these establishments, we simply find, that “so many persons were treated with white swelling; so many were cured; so many others received no benefit;” nothing more. It is evident, then, that all the patients did not present themselves under the same circumstances, and we may even say that some of them were injured by the use of the mineral waters. The reports published by the establishments alluded to are completely useless, because they do not distinguish the favourable from the

unfavourable conditions, and enable us thus to lay down some precise indications.

2nd. Douches.—Douches are often employed, and are a powerful means of resolution. According to the degree of excitation desired, we prescribe them in the form of common water or with medicated fluids. The force, direction, and form, are to be varied according to circumstances: thus they may be given with a watering machine, or in a continued jet, ascending, horizontal, or descending, and in the latter case they are directed from a greater or less height; experience has established the following principles as to the best method of employing them. Douches should be reserved exclusively for the chronic stage; at the commencement they should be very gentle, so as not to determine an inflammatory state instead of an excitement tending to resolution. At first an interval of forty-eight hours should separate each application; afterwards they may be renewed every day, if the excitement be not too great. The tumour generally appears redder and more warm after the douche; it is also a little swollen, and the patient feels some pain in the part; rest is now absolutely necessary: if these symptoms do not last more than half an hour or two hours, it is a good sign, and the tumour begins to diminish before the lapse of twenty-four hours. In this case we continue the douche without any change: if, however, the excitement passes the time just mentioned, the douche must be suspended; and should it continue for twenty or twenty-four hours, we must combat it by an application of thirty leeches, according to the patient's force, and by emollient cataplasms. The inflammation if neglected would bring on rapid disorganization of the tissues, and render amputation indispensable.

3rd. Medicated Friction.—Benjamin Bell has laid much stress on the utility of mercurial frictions; the ointment which he employed contained but a small quantity of mercury, and the patient rubbed in ten scruples of it three times a day, without any danger. Each friction lasted an hour; he never pushed them so far as to bring on salivation; but contented himself with

slightly affecting the mouth and keeping up a little tenderness there for some weeks. Bell also waited until the inflammation was in a great measure dissipated, but other surgeons have not always followed this salutary rule, and employ mercurial frictions without any distinction of case. I can affirm that some experiments of this kind, made while the acute stage of white swelling existed, turned out very badly in my hands, and for the future I shall be very careful not to employ them until the chronic stage is completely established. Besides, it is very difficult in private practice to persuade the patient to employ this method, on account of the prejudice so generally prevailing against salivation. It may be advantageously replaced by the ointment of the hydriodate of potass, a medicine of great energy, and on that account requiring very great attention. We should never commence frictions with the ointment until every trace of the acute stage has disappeared. I have seen the most terrible inflammation, and even abscess, produced by a neglect of this precaution. Iodine is so stimulant, that a quarter of a scruple of the ointment employed in friction is often enough to determine heat and even inflammation. In short it is a precious remedy, but one that we should prescribe with the utmost caution.

4th. *Rubefaciants*.—Liniments containing ammonia, or the tincture of cantharides, have been recommended; fifteen years ago these were the favourite remedies: the liniment was rubbed in once or twice a day. You can readily understand that rubefaciants should never be employed until all inflammation is subdued; besides, whenever we order liniments or ointments, it is essential to wash the parts every day with soap and water &c., in order to clean the skin and make it more accessible to the action of those remedies.

5th. *Blisters*.—There are few means more generally employed against white swelling than blisters, but too often without any attention to the indications. Blisters, very useful in the chronic stage, are dangerous in the acute one, when they can only hasten the degeneration of the tissues. In some cases they may be applied upon the tumour itself; in others it is more prudent to place them on one side. Thus when the skin partakes in the alteration, the blister should evidently be placed at some distance; and the same rule holds good when the tumour depends on a rheumatic cause. If the tumour, for example, occupies the knee-joint, a blister applied immediately to the part can only serve to fix the inflammatory principle; I therefore apply it on the outer side of the thigh, at the union of the

upper and middle thirds; here it acts as a revulsive; sometimes I tried it in this situation even during the acute stage; and the pain and other inflammatory symptoms disappeared as if by enchantment. But we must not forget that there were exceptional cases, and that the cause of the disease explained the cause of a success which under other circumstances would have been more than doubtful. On the tumour itself, flying blisters are justly preferred, and we may apply as many as five or six successively to the affected knee. Sometimes the first blister does not produce any effect: we allow it to heal, and in a day or two put on another. In general it is a good sign when it determines some pain, and a little heat in the affected tissues. These symptoms last only a short time, and are followed by a certain diminution of volume in the tumour. As long as the amelioration continues, we should not disturb the process of nature; but when we are assured the whole effect of the blister is produced, it is time to apply another. Finally, the blister may determine more inflammation than is proper. If rest and topical emollient applications do not subdue it within twenty-four hours, we must, without delay, put on twenty or thirty leeches. The inflammation, watched in this manner, is not dangerous, and even hastens the resolution, but the means necessary to keep it within bounds, cannot be had recourse to at every instant; hence we must wait until all is quiet, before we think of putting on a new blister, and it will also be well to diminish its size, and then determine a slight degree of irritation.

6th. *Cautery*.—The flying cautery dates from the time of the Arabs, and latterly Rust has recommended it as applicable to every kind of case. This is an error which must frequently be attended with unfortunate results. The cautery, when employed in chronic cases, often produces the most astonishing benefit; in acute cases the energy of its action would lead to a result directly opposite; besides, the cautery requires a very great degree of reserve in its employment, and is chiefly applicable to tumours that are very hard. The iron is passed over the surface so as to produce a burn of the second degree: before renewing the application, we allow the wound to heal, and wait until the amelioration becomes stationary. As soon as the tumour has become a little soft, we must abandon the cautery, and have recourse to graduated compression.

7th. *Moxa*.—The observations just made are perfectly applicable to the moxa, a remedy still more efficacious, as it acts more deeply on the tissues. Hence we should

never employ too large a moxa, one that would leave an extensive wound requiring a length of time to heal. I prefer small moxæ, as large as the extremity of the middle finger; in this way we can employ a greater number, and at shorter intervals, for it is generally necessary to cicatrize the first wound before we think of making a second. The moxæ I employ are made of the *artemesia Japonensis*; they burn quickly and of themselves, and hence cause less irritation than the ordinary moxæ. Some surgeons apply the moxa upon the tumour itself; but in this case the skin must be quite sound, and the tumour very hard, otherwise we run the risk of exciting too violent an inflammation. It is better to apply it at some distance, and the action must be watched with the greatest care, so as to combat in sufficient time any accident it may produce. There is only one case in which I depart from the rule just mentioned, viz., when the disorganization advances rapidly, and the most rational means fail; in a word, when all seems lost, we may then try the moxa as a last resource, for "ad extremas morbas, extrema remedia."

8th. *Setons*.—Finally, the seton acts still more deeply than the moxa, and requires more caution in its use. Some surgeons do not hesitate to pass it through the body of the tumour, and I have seen this done eight or ten times. In all these cases amputation became subsequently necessary. Such a result is not encouraging, hence I never employ the seton except in those very rare cases in which the tumour is chronic to the last degree, and influenced by no remedy used; even here I pass the seton on one side, and never through the tumour.

INTERNAL REMEDIES.

As white swelling is generally a local affection, little stress has been laid upon its internal treatment. Doubtless, whenever it appears connected with any general indisposition, the latter was combated, but then the surgeon seemed to fulfil an indication foreign to the affection of the joint. Some surgeons, however, have administered iodine, even in cases that were independent of any constitutional diathesis; I have repeated their experiments without obtaining any other result than the injury done to the digestive organs; it is therefore a remedy not to be recommended.

But, latterly, another method of internal treatment has been proposed by Dr. O'Beirne of Dublin; it consists in giving internally calomel in doses strong enough to bring on salivation in a few days. As soon as this phenomenon sets

in, the pain disappears as it were by magic, the tumour diminishes, and articulation returns rapidly to its normal state. These seductive promises were supported by seven cases contained in Dr. O'Beirne's memoir, and it therefore became a matter of high importance to determine how far they merited confidence. The number of patients affected with white swelling, who present themselves at *La Pitie*, is sufficiently great; and since the end of 1834, up to the present day, we have made a great many experiments on the subject. Let me remark, in the first place, that we followed exactly M. O'Beirne's formula, which is *Calomel. gr. xviii; Pulv. Opii gr. iii. F. vi pilulæ; pr. i omni tri-horâ*. The six pills are enough for one day; they are repeated next morning, and so on until the salivation is well established.

Whenever the white swelling existed in an acute stage, the pain disappeared with wonderful rapidity, and the tumour underwent at the same time a remarkable diminution; so far the assertions of the Dublin surgeon were fully confirmed. But it was by no means the same when the tumour so treated had been reduced to the chronic stage, or when the patient, from the beginning of the treatment, presented only the chronic symptoms. The following observations, however, will give a better measure of the value of this treatment.

CASE 1.—*Acute White Swelling of the right Knee; good effects of the Mercurial treatment; Cure completed by other means.*

—Jean Vaste, coachman, of good constitution, was received into the hospital on the 28th December, 1834, with white swelling of the right knee-joint; he always enjoyed good health up to the month of June last: at that period he fell upon his knee, and after some days began to feel some pain in the joint; these gradually increased, the articulation became tumefied, and at length he was unable to make any use of his limb. At the time of entry the right knee was one third larger than the other one, the skin red and warm, and the articulation affected with such violent pain that the patient could not sleep. No fluctuation could be felt, and the tumefaction appeared to be independent of the osseous tissue. The constitution had not suffered, and the state of the different viscera was excellent.

The patient was placed upon low diet; 50 leeches were twice applied around the joint; then cataplasms &c.; the inflammation was barely modified, and the pain continued as violent as ever. I now submitted the patient to the Dublin method: first day, no result; second, there were colicky pains, diarrhoea, six stools; the

patient already feels a slight improvement; third day, mouth a little sore, gums swollen; fourth day, the salivation fully established, and the pain has completely ceased; it requires very strong pressure or motion of the joint to produce any painful sensation; the salivation continues, and all inflammatory symptoms of the tumour disappeared the following day. The volume of the joint had been exactly measured at the commencement of the treatment; on the fifth day it was measured again; a diminution of an inch was found at the upper and middle part; of three-fourths of an inch at the lower. From this time no further diminution took place, but the pains did not reappear. The salivation continued for some days longer, gradually disappearing; on the 18th January the tumour was reduced to a state completely chronic: the skin's warmth was natural, and moderate pressure gave scarcely any pain. I now followed up the treatment in the ordinary manner; leeches in small number, frictions, and compression; the remainder of the malady was dissipated by these means, and the patient went out perfectly cured on the 2nd of March, 1835.

In this case the treatment was evidently abridged in a most wonderful manner by the salivation, but it is not less evident that the influence of the salivation was limited, and that alone it was not sufficient to obtain a cure. It would appear that this phenomenon merely dissipates the inflammatory symptoms and the tumefaction connected with them, but once arrived at the chronic stage the improvement stops; and this fact has been so general in the experiments we have made, that we can with difficulty understand the success which Dr. O'Beirne says he has obtained with this remedy alone. But before citing an example of the mercurial treatment in chronic cases we will prove by a curious observation how efficaciously salivation subdues the most violent pain, even when the peculiar nature of the tumour forbids us to expect any hope of cure.

CASE 2.—Fungoid White Swelling. Severe Pain calmed by Salivation. Amputation.—Ingarama, a retired officer, 57 years of age, entered the hospital on the 24th of October, 1834, with a white swelling of the right knee. About ten years ago, while fencing, the fatigue excited some considerable tumefaction in the right knee. This disappeared in fifteen days under rest, leeching, &c. On the 23rd August, 1834, the knee began to swell without any known cause, and in forty-eight hours acquired double its natural size. At first there was no pain except when the patient wished to stand up, but after

five days the skin became warm and the tumour got hard, and was the seat of very severe pulsative pain, which the slightest motion rendered intolerable. No other treatment except poultices and rest was administered, and the pain continued unabated up to the patient's reception into the hospital. The tumour at this time was fusiform, soft, spongy, like a lipoma, and seemed specially to reside in the soft articular tissues; it was evidently one of those spongy tumours which resist all treatment. The slightest pressure was intolerable; the patient's constitution was sound, and his appetite continued good all along. He was put upon mercurial treatment (six pills a day); he took nine in all. After the third, he experienced some griping pain and diarrhœa during two days. As soon as salivation was established all pain disappeared, and with it all symptoms of inflammation, such as heat &c. The tumour had diminished one inch above and at the middle, and half-an-inch inferiorly. This state continued about ten days, but when once the salivation had passed away, they returned again with such rapidity, that in a few days amputation became necessary.

In this observation, as in the preceding one, the efficacy of the mercurial treatment seemed to reside almost entirely in the salivation which it provoked. The slight diarrhœa during the first two or three days certainly gave some relief, but this is trifling, and we may presume we should obtain the same result with any other gentle purgative. But the salivation once set in, there is no longer any doubt; the pain disappears as if by magic, and this perhaps is one of the therapeutic methods in which the relation of cause and effect, between the remedy administered and its results, is the most incontestable, on account of the rapidity and constancy with which this result is manifested.

We now proceed to show the results of this treatment in the chronic stage.

CASE 3.—White Swelling in the Chronic Form. Displacement of the Patella. Mercury given without any benefit.—Malbec, 28 years of age, was affected with white tumour from the age of ten years, when the knee commenced to swell without any known cause. During two years it was treated by emollients and aromatic fumigations, and the patient got much better. At fifteen years of age he fell upon the knee and re-excited all the bad symptoms; several falls at different times continued to keep up the excitement in the joint, and in 1834 the limb became permanently flexed, and quite useless. The knee was now very voluminous; the patella turned

outwards, and the inner side of the articulation very much tumefied: pressure about the patella gave pain; elsewhere none.

I first removed the pain by leeches and emollient topics, and after this I succeeded in reducing the circumference of the tumour about one inch and a half, by means of graduated pressure and iodine ointment; but here the amendment stopped, and the tumour continued in this state for a considerable time, when I commenced the calomel treatment. The first day the patient had some griping and diarrhœa: on the following days he experienced constant nausea, and vomited once or twice. Salivation set in after he had taken twenty pills, and became excessive after the 23rd, when it was necessary to suspend them: the discharge of saliva continued for five days with such intensity, that the patient declared he would not at any price recommence the same treatment. No symptoms whatever of amelioration appeared, and the patient continued for a length of time at the hospital in the same state.

It would certainly be unjust to condemn any therapeutic method in a similar case: the cure was here impossible, and nothing remained but to assure ankylosis by dissipating the alteration of the soft parts. For this purpose we employed the remedies we are in the habit of using, which produced a remarkable improvement, and there was some reason to hope that the new method would give a new impulse to the curative process, which had become stationary; but nothing of this kind happened, and the little action of mercury on chronic tumours is also proved by the following cases:—

CASE 4.—Chronic White Swelling of the Knee. Mercurial treatment without effect.—Boissel, 23 years of age, was received into the hospital on the 19th March 1834, with an acute white tumour, which I attacked and soon reduced to the chronic stage. The tumour remained in this state for some time, and the patient was put on the mercurial treatment on the 15th September, but only took three per day: on the second day slight diarrhœa ensued; on the third the diarrhœa ceased, and the salivation was abundant: the pills were now stopped, and the salivation continued fifteen days without our ever being able to notice any change in the tumour.

CASE 5.—Chronic White Swelling of the Ankle-joint. Mercurial treatment.—Effect nearly null.—Aubry, 30 years of age, was taken into the hospital on the 16th January, 1835, with a chronic white swelling of the ankle-joint. On the 15th Feb-

ruary, the mercurial treatment was commenced, six pills a day. On the following day the salivation was sufficiently abundant; and on the third day it was unnecessary to give any more. The salivation continued six days; the tumour diminished one line above, two lines at the middle, and half an inch below; after which it remained completely stationary: the patient left the hospital without being cured. However, we must confess that in some cases salivation has appeared a little more efficacious. Thus, in the case of one patient, we obtained a diminution of half an inch at the upper part of the tumour, and of two-thirds of an inch below. Here is a most striking example.

CASE 6.—Chronic White Swelling of the Right Knee: Mercurial treatment: Remarkable Amelioration: Cure completed by other means.—Gayneux, 19 years of age, was affected for six months with a white swelling of the right knee. On the 22nd January, 1835, the day of her entry into the hospital, the circumference of the knee was nine inches in the middle, and eight and a half at the upper part. Calomel pills in the common dose: in three days the salivation was established, and augmented gradually up to the 8th day: the pills were discontinued after the 15th. The tumour was now diminished in all directions three quarters of an inch, but it then became stationary. On the 6th February, compression was had recourse to, with cones of agaric and circular bandages.

Feb. 13. Sharp pain, which forced us to suspend it. 18th. Compression again employed; at the twelfth day of compression the tumour had diminished at least three quarters of an inch, giving a total since the commencement of an inch and a half to one inch and a quarter. Towards the end of February it again became stationary. At the beginning of March, 3rd, degree of compression, and no diminution; ten leeches twice above the patella; compression renewed. March 20th. Diminution of two lines above, in the middle, and below. The compression was continued in the same degree up to the 15th of April, when the patient left the hospital, able to walk without pain, and very freely.

Remarks resumed.—We have multiplied these experiments at the hospital, and have even prescribed the mercurial pills in town; the results were exactly similar to what has been mentioned. Generally the first pills determine a slight diarrhœa; in rare cases vomiting; but other accidents soon cease, and especially so when once salivation has set in. In some patients it

begins the first or third day; but most commonly it requires five or six days, and, consequently, twenty or thirty pills. In one single case we have given up to sixty pills without producing salivation; the patient had just come out of another hospital, where he had been treated with mercury. In this case, also, the vomiting, excited by the calomel, persisted for a long time, and returned at intervals.

How are we to explain the astonishing action of this remedy on white swelling in the acute stage? Some persons have latterly recommended mercury as an antiphlogistic. We know that mercurial frictions on the affected parts have dissipated erysipelatos inflammations, calmed peritonitis, or even inflammation of the liver. On the other hand, the English make great use of mercury internally in most inflammations; but in the first place they do not push the mercury in all these cases to salivation, and the results of the mercurial treatment in syphilis seem to conclude against this pretended antiphlogistic property, for it is well established that mercury only exasperates the inflammatory period of chancre, and in general of all inflammatory venereal symptoms.

The question of the properties of mercurial preparations is far from being settled definitively, and as to the cases which occupy us, we cannot explain its action by the laws of ordinary revulsion, since neither the diarrhoea nor the vomiting which it sometimes produces has any effect on the tumour, while that of salivation is at once so quick and powerful. If we compare this new method with the ancient, we must confess, that in acute cases it produces immense advantages: the incessant pains and the irritability of the tumour, which required often four, six, or even ten months, to dissipate them, here yield in a few days, and do not return. The patients are also spared the loss of strength produced by frequent sanguineous emissions; finally, the latter frequently fail to relieve the patient from the pain, which keeps him constantly awake, and hitherto the calomel has constantly succeeded. In one of our patients the pain was intolerable, and resisted every means. Salivation, brought on in a few days, dissipated it instantaneously, with every other inflammatory symptom. But when the inflammatory element has been removed, the action of calomel becomes null, or at least much less than before, and hence we may see how important it is to distinguish, as we have done, between the two stages of the disease.

Let us now terminate in a few words the treatment of white swelling in the chronic stage. All the means of resolution

which we have reviewed must not be employed indiscriminately. We have pointed out the circumstances which require the most energetic; for the rest one would naturally begin with the most innocent, and be directed by the result. When a single remedy is not sufficient we may combine several together, as leeches, compression, friction with iodine. Whenever any remedy seems to be worn out, we should quit it and take up another. Finally, there are cases which, after having employed every means, and brought the tumour nearly to a perfect state of resolution, seem to resist any further amendment: here we have often succeeded by leaving the tumour to itself, and nature completes a cure which she refused to our art. When the engorgement has been completely resolved, and the tissues are brought back to their natural state, we have still some indications to fulfil. Sometimes, especially for the knee, we have to dissipate a false ankylosis, with flexion of the leg. This is done by mechanical means. To prevent a relapse of inflammation we should proceed with caution, and apply the apparatus at first for a few hours only. The duration and force of the extension may be gradually increased. But if we have to do with a real ankylosis, should we refuse every attempt of this kind? I have seen at least thirty patients leave this hospital with complete ankylosis, as far as it was possible for any one to judge. Four of these afterwards returned with the ankylosis destroyed, and enormous enlargement of the articulation, in consequence of falls or other external violence. I treated the new affection with the same success as the former, and the ankylosis did not turn. These facts induced me to ask myself if we might not force the ankylosis, when all the other symptoms have disappeared. As yet I have been prevented by the fear of severe accidents; however, a trial of this kind seems to me the more authorized, that true ankylosis is often very limited, and we may often have taken a false one for a perfect junction of the bones. After the cure the patient should commence with very gentle exercise; even a moderate walk determines frequently at first some sharp pain, and renders the patient anxious; however, if it be slight, and do not last more than an hour or two, we may continue the exercise; but if the pain be very severe, and last a whole day, this is a sign that some trace of the disease remains, and we must return to the usual treatment, rest, &c.

White swellings are very apt to return. I have often seen the patients return after a month or two, but I have latterly been

able to prevent these frequent relapses by supporting the joint in its movements—as, for example, with a laced cap for the knee, &c.

We have passed over in silence the treatment proper for white swelling of a syphilitic, gouty origin, &c. It consists in the measures applicable to the acute stage; for the chronic we have only to add to the local means such remedies as are most fit to combat the general affection.—*French Gaz. Med.*, No. 22.

CASE OF

TRANCE, OR COMA SOMNOLENTUM,

IN A GIRL, TREATED SUCCESSFULLY.

By JOHN FOSBROKE, M.D., Physician to the Ross Dispensary.

At the beginning of March last, as I was riding through the "Hole-in-the-Wall," in Foy parish, I was asked to see a girl, *ætat.* 13, of interesting appearance, by name Eliza Mutlow, who was apt to be suddenly affected in the day-time with fits of profound lethargy. In these paroxysms she had slept at different times for three nights and two days together, and during the week before I saw her, for thirty-six hours at a stretch. Before and after she awoke from these fits she pursued her usual occupations, without any trace of disorder of the brain or mental faculties; but her breath was foul, her belly somewhat tumid, her face pallid, and her general appearance delicate and hebetie, and she picked her nose.

The country folks about her stated, that a Dr. C. Underwood, a medical man practising in many branches of the profession here in many ways, had been up and seen her "a kit of times," had applied leeches to the head, and had treated the case in other respects as a *vascular* (hum!) affection of the brain.

Seeing in this case that the mucous membrane of the alimentary tube was disordered, and in all probability colonized with worms, I prescribed for her M. Peschier's ethereal tinct. of the male fern buds, dose from viij to xxx gtt. *ter die*, dropped on a lump of sugar, which I have introduced into practice here, to supersede the other nauseous remedies for these vermin, and also proper doses of jalap, scammony, and calomel, to be taken every third morning, for the purpose of bringing away their *débris*.

I saw her again on March the 8th, and understood that she had passed slimy eva-

cuations with thread worms (*tricocephali?*). Her complexion was fuller of colour, and her breath less fetid, without any recurrence of lethargy. She continued serving in a beer-house, and taking the anthelemintics, till March 13, when I examined her again, and found that her sleep had been natural, and that her general health was a good deal better; but I observed that she had a "strawberry-and-cream" tongue, and though I could discover nothing in the development of the jaws and teeth to require attention, I apprehended there was still some irregular state of the brain and nervous system. On March 16th, she went off to sleep again in the day-time, and on March 24th I found that she had had two fits, one of thirty-six hours, the other of twenty-four hours duration. In these fits her head and neck hung back loosely and heavily, and no device could arouse her. But the last time they got her, towards the end of the fit, on her legs, and led her about the house, and from the house down to the banks of the Wye just below, and poured cold water on her head, to no purpose, however; they also put food into her mouth, which she swallowed without opening her eyes, speaking, or showing consciousness. When she awoke she said that she had heard imperfectly something that was said to her towards the close of the fit, and recollected experiencing a sense of something like fluid floating in her brain.

From March 24th she took 3j doses of sulphate of zinc in sage tea, for five or six following mornings. The first dose caused her to vomit excessively, and she slept once after it for two days and a night. On the 16th of April, after taking all these doses, and retching almost all day long after each dose, I found that she had had no recurrence of the lethargy. She cast up nothing but what she drank and watery mucus, until the Tuesday week before the 16th, when she had a violent vomiting of blood and white streaked stuff from the stomach to the quantity of about 6jss, with pain across the stomach and right side. On March 28th I went to pass a fortnight at Cheltenham, and her relations wanted to take her to some man near Hereford, but the girl refused to go, because she thought I had done her good. On the 28th of April the young sleeper came to Ross to see me, and said it was her belief that the treatment had removed the fits. I ordered her to take, twice a day, a pill containing *Ammoniacet. Cupri* gr. j; *Camph.* gr. iv. I have heard nothing of her later than the 16th of May; up to that date the fits had not recurred, but some eruption had come out on her hands.

The case was open, in no possible way