ing mentally; much cleaner in habits; no longer bites her nails; and has very much more power of self-control."

Her subsequent progress was rapid and continuous. She became pleasant, amiable, vivacious, energetic, industrious; was natural in behaviour, rational and intelligent; took abundant outdoor exercise, and was to the fore at dances and other entertainments. She evinced, too, a gratifying and unusual sympathy for her fellow-patients, consoling, helping, and encouraging in every possible way those whom she had formerly teased, annoyed, and now and then maltreated.

She herself was convinced that the accident was the turning point in her illness. She declared that it was the first severe physical shock she had ever experienced, and it "brought her to her senses."

On March 28th, 1885, she was discharged recovered, after nearly six years of asylum treatment.

Two Cases of Syphilitic Insanity occurring after Alcoholism, and presenting Paralytic Symptoms. By A. R. URQUHART, M.D., Physician Superintendent, James Murray's Royal Asylum, Perth.

I desire to place these cases of syphilitic insanity on record, as they fully illustrate the difficulty of forming a speedy and accurate diagnosis from general paralysis when the personal history is not at once fully and fairly stated. There has been of late a series of admissions of syphilitic patients into this hospital, and in grouping these according to their clinical features we have found the two now to be described forming a definite class. Both were set down as general paralytics on their first reception. I had, however, the consolation of erring in the very good company of the experts who sent me these cases; and to some it may yet remain an open question whether the first impression is not correct, and whether their present recovery may not be a mere remission of true general paralysis.

Before proceeding to detail the results of observation and treatment, and to point out how the symptoms conformed to the generalizations of the authorities on these diseases, I may be permitted briefly to urge the importance of making it part of our routine practice to carefully examine the genitals of newly-admitted male patients for scars of chancres or other sores. The sexual history of such patients as these now under

consideration is, of necessity, of prime importance, and I have more than once found such scars explain what would otherwise be obscure and difficult cases, and give the necessary clue to causation and treatment. Dr. Buzzard lays it down as a fundamental rule in the investigation of every case of nerve disorder that the possible association of the symptoms with syphilis should be duly considered, and his book on this subject fully bears out the justness of his observation.*

Case I. (From the notes of Dr. Greig, late Assistant Medical Officer.)—X., a retired bank clerk, æt. 46, was admitted on the 30th September, 1885. He had been living for three years in a comfortable country house, with his wife and two young children—the elder three years, the younger three months old. Two years ago his wife had a miscarriage; and the elder child has a large head and a peculiarly "deep" voice.

History.

Family history.—No hereditary neurosis. Parents both died in middle age, his mother of cancer. One brother and one sister, both alive and healthy.

Personal history.—Naturally of a kindly but reserved disposition. Till eight years ago was steady and industrious, but about that time began to lead an irregular life, and drank heavily. His sexual excesses resulted in syphilis, for which he was then imperfectly treated. He left the banking business in 1882. Nine months ago excessive drinking and smoking (4oz. of strong tobacco a week) culminated in an attack of delirium tremens. From this attack he made a partial recovery. It left him subject to intense headaches, red eyes, deafness, a very slow pulse, and contracted pupils. Mentally, he became restless and irritable, being especially excitable on taking stimulants, even after half a glass of whiskey. During this period the patient has gradually fallen off in health and condition. It should also be noted that he has lately been considerably worried by money losses.

Five weeks ago, while working in the garden, he had an attack of transient loss of power, accompanied by a feeling of burning all over the left side, as "if his coat were on fire." This loss of power was only partial, as he was able to walk from the garden to the house.

Since then patient has gradually become weaker, mentally and physically; he has been occasionally very violent, and dangerous both to himself and others. He developed delusions of many kinds, of hearing, and especially of suspicion. Ideation is now slow, he has difficulty in understanding what is said to him, and replies after hesitation.

Present condition.

Physical.—Patient looks ill and haggard, but younger than his years. Complexion fresh. Height, 5ft. 8in.; weight, 10 stones.

* "Clinical Aspects of Syphilitic Nervous Disorders," 1874.

Slight intertrigo between scrotum and thigh. No injuries discovered.

Circulatory system.—Pulse 80, regular and weak. The first sound of the heart is feeble, the second is accentuated over the aortic area. He has slightly varicose veins over the calves.

Respiratory system—in a normal condition.

Digestive system.—The breath is very offensive; the tongue foul; the teeth good, but coated with tartar. The bowels are slightly constipated.

Genito-urinary system.—Urine acid in reaction, colour high, becoming muddy on standing, of sp. gr. 1035, and deposits on standing a very large quantity of amorphous urates.

Nervous system.—There is marked dysphagia, thickness of speech, and staggering and uncertain gait. The pupils vary much, and are irregular.

Mental.—Patient labours under considerable depression. When asked a question he answers generally after some time, or after two or three repetitions. His memory seems good; he is not always coherent. He labours under many delusions—sees flashes of light, hears voices, imagines that he is to be killed, that his children are to suffer some dreadful fate.

History of Case.—On the day of admission, and that following, the patient was dull and depressed, slept badly, and wept a good deal.

About midday on October 2nd he brightened up a little, and became more animated. At dinner he suddenly got up and tried to stab himself with a knife, but fortunately failed in his object. Almost immediately afterwards he had a sudden and violent attack of excitement, in which he required to be held. This attack wore off, and the patient became quiet and had a better night. Writes the following letter in a shaky hand.

The Murray, Perth.

My Dear J.,—I have been thimking our, ourpossessions & imcomee I ann made rather anxioues thereeefore has kunkly promiseed the forward the further forward.

I think dear J. the extra extra premses I will have to expennd this year will thereefore warrantyre The sale of carramges.

October 3rd.—In the morning he was depressed and weeping. During the day he became more rational. He observed and recognized the carriage in which his wife had come to visit him, but said that he "would rather not see her."

October 4th.—He was to all appearance quite rational and sane; he remembered perfectly everything that happened while he was excited, and explained his violent conduct, which he described as being caused by some imaginary tormentor. Thus, he says that on October 2nd, when he seized the knife, he saw a man before him with a naked knife in his hand, and his child's head stuck on a wire on the opposite wall, the body being in the coal-box. He wished to kill this imaginary man, and when the assistant medical officer entered the room the man went to the coal-box, brought the child's body out,

fastened the head to it, and thereupon the whole vanished. All this the patient described graphically and coherently. He also observed that when harassed by these delusions, he saw bright flashes of light, and suffered great pain and heat in the head.

October 7.—At 11.15 p.m. he had what he called a "shock." According to his own account "he felt as if a bundle of nerves were gathered together and dragged towards his heart." There was pain in the cardiac region and a "peculiar feeling" up the left side of the neck and left arm. This spasmodic attack lasted only for a few seconds, then passed away, leaving him quite well.

October 15th.—He had another similar attack. During the interval he had been quite well, was on parole, and in the convalescent ward. This attack he described as follows :—"It began with a peculiar painful sensation on the left side of the tongue, and gradually spread to the left cheek, which began to contract and move about. At the same time the saliva began to flow from the left side of the mouth, and the left eyelids were also convulsed, causing rapid winking. There was heartburn, waterbrash, and nausea, and a burning sensation over the whole of the left side. The left arm became 'dead' and powerless for some time. There was inability to speak intelligibly. The twitching never passed below the collar-bone." All passed off after a few minutes, and patient was able to walk upstairs. About seven minutes later it began again. He was then seen by the assistant medical officer. The phenomena were those described by the patient; his pupils were equal; both hands gave a strong grasp; the tongue could not be protruded steadily, but was rapidly extended and drawn in again. He could not speak one word intelligibly owing to the spasmodic condition of the muscles of articulation. He was immediately put to bed, when the symptoms passed off, except for a slight contraction of the muscles at the left angle of the mouth, which persisted for about two hours. Again at noon he had another slight spasmodic attack, characterized by slight twitching of the left eyelids and of the left arm and hand. At midnight he had another very slight attack.

October 20th.—He awoke with a very severe frontal headache, which persisted all the morning. At 7.20 he had a spasmodic attack exactly similar to those described above, the spasm coming on and passing off twice within 20 minutes. Hydrarg. Iod. Vir. (gr. 8 per diem) was prescribed to-day.

October 22nd.—He had again a severe frontal headache, which was accompanied by nausea and vomiting, relieved by sharp purgation.

October 23rd.—He was to-day well enough to visit home, a railway journey of some 25 miles, accompanied by the assistant medical officer. He was very well all day, but about 7.30 p.m. it was noticed that his left naso-labial fold had disappeared. Shortly afterwards he complained of a pricking sensation in his left thumb,

and his mouth was slightly drawn to the left. This condition persisted for about an hour, when he had an attack of clonic spasms. It lasted for about three minutes and presented the usual features, but left his speech thick for about two hours.

October 24th.—The nape of the neck was blistered.

October 26th.—Severe headache, relieved by sharp purgation. Blister kept open by Ungt. Sabinæ.

November 4th.—Patient began to be salivated. The dose of Hyd. Iod. Vir. was consequently lowered to 1 gr., and on the 15th to $\frac{1}{4}$ gr.

December 15th.—As patient continued perfectly well, mentally and physically, he was discharged recovered, and readmitted for a few weeks as a voluntary patient. On the 21st December he left perfectly well, and better than he had been for years according to his own account. When discharged finally he was taking $\frac{1}{4}$ gr. Hyd. Iod. Vir. thrice daily.

1886, August 28th.—The patient writes: "My head is now as clear as a bell, and my general health excellent. I got a young horse the other day, and being misbehaved I had an exciting fight with him, and had afterwards what I think was a very slight attack of my paralytic friend. I felt a gritty sensation in my hand, and afterwards it apparently settled in the shape of a tingly feeling in the point of my toung." (*Sic*).

November 2nd.—Dr. Turnbull writes: "X. says he is well in mind. The one thing he spoke about as indicating a shortcoming is that he is not able for so much mental concentration as he was formerly. If he has to think long or deeply about anything which involves a difficulty, he feels that he gets confused and cannot work it out. On at least one occasion he had peculiar sensations passing up his left arm, which he describes as similar to what he felt in the transient attacks of paralysis he had while at Perth.

"Mrs. X. thinks her husband is as well as ever he was, except that he is certainly more irritable than he used to be. He will flare up very suddenly on slight provocation.

"Dr. Constable has seen Mr. X. occasionally during the summer, and considers that he keeps remarkably well, though at times he still complained of 'that load on the top of his head.'

"For myself, I think Mr. X. is very well indeed just now. He spoke most pleasantly and correctly, and in a perfectly natural and sane way. He transacts all his own business himself. He spends his time mostly in his garden and greenhouses, being practically his own gardener; and he has a capital result in flowers to show for his labour. He also goes in for riding a good deal. I have above mentioned all the symptoms he shows now; and in every other way, so far as I could learn from himself and from his wife, he seems to be perfectly sane both in speech and conduct.

"Of course I was on the outlook for some change in his articulation. Occasionally I fancied there was a slight defect, but it was very

slight—not enough to warrant one in drawing any conclusion from it, *if* it existed at all.

"Certainly, I did not expect when I first saw Mr. X. that he would ever get rid of his illness so remarkably as he has done. He himself says that there was no alcohol and no chloral or other drug in his case, and I believe his statement on that matter implicitly. It will be interesting to watch how he goes on."

Case II.—Z. (From the notes of Dr. Murray, Assistant Medical Officer.) Mr. Z., cashier in a large office in Glasgow, aged 34, was admitted on the 20th February, 1886. He previously lived in good hygienic circumstances with his wife and one child, about two years old.

Family History.—No hereditary neurosis. A brother and sister died in infancy. One child of the patient—the eldest—died at full time of pregnancy; the second is alive and healthy; the third died fourteen days before birth, and when born was in a state of desquamation, but there was no rash. This was in February of 1885. Since then there has been no child.

Personal History.—Till 18 months ago led a regular life as a rule, but was occasionally dissipated. About that time, however, he began to drink heavily—according to his own account beer only—led a fast life, and had promiscuous sexual intercourse. This went on for six months, when he was suddenly seized with very severe headaches, and had to lie up. These became continuous, and drowsiness and partial stupor set in. For this he was treated by Dr. Tennant, Glasgow, who applied blisters along the back, which were kept open for a lengthened period. Under specific treatment the headaches disappeared, but dulness and stupor remained, and have never been dissipated. The bodily health at the same time deteriorated; his appetite became very bad, and finally nervousness, with tremors of the hands, set in, accompanied by polyuria and great thirst. About four weeks ago he went to the country, being unable to work in Glasgow, and since then his bodily health has somewhat improved. Mentally he became steadily worse; his memory deteriorated and his ideation slowed. Latterly he developed delusions of suspicion regarding his wife. In this state he came to visit friends in Perth. Three days ago he had a succession of epileptiform fits, which lasted all night, and left him violent and acutely maniacal. This condition was followed by a period of stupor or semi-coma. These conditions have since alternated at short intervals. During his maniacal attacks he has violently tried to strike anyone near, and struggled when held. Delusions regarding his wife are firmly fixed; he thought that she was transferred to other men. He also has had delusions of suspicion that he was to be poisoned by chloroform, &c. The general practitioner in attendance thought that he was suffering from uræmic convulsions, having found albumen in the urine. About a week subsequent to admission it was ascertained from Dr. Tennant that he had diagnosed the attack of a year ago to

be syphilitic meningitis, and had treated patient for that complaint.

PRESENT CONDITION.

Physical.—Stoutly built, well nourished, but flabby. Height, 5ft. 2½in.; weight, 9st. 8lb. His expression is dull and stupid; his skin is smooth and pale, almost waxy in appearance, hot and dry, and presents no appearance of an eruption of any sort. Temp. 102° in the axilla.

Circulatory System.—The pulse is 118, weak, quick and jerky. The heart-sounds are clear and sharp, the second rather accentuated over the pulmonary area.

Respiratory System.—Normal.

Digestive System.—The breath is very offensive, the tongue is dirty and furred, the mouth dry, and taste seems impaired. No abnormality can be made out in the abdominal viscera, on physical examination. The bowels seem in fair order. Patient has an excessive thirst.

Genito-urinary System.—Genital organs normal. Urine: 10 to 11 pints passed daily; (faintly acid); pale straw-colour; of sp. gr. 1005; containing no albumen or sugar.

Nervous System.—The limbs are shaky, especially the hands and arms, when the muscles are put on the stretch; his gait is uneven; the speech is thick and indistinct, especially when long words containing sibilants are used; he is distinctly aphasic. The patellar reflex is much exaggerated, and ankle clonus is present; the pupils are regular and equal, and the sight is good. Ophthalmoscopic examination reveals a normal fundus, except that the retinal vessels are tortuous and the disc a little congested. The hearing on the right side is defective. There is incontinence of urine, the desire to micturate coming on suddenly and being "too strong for his powers of retention."

Mental Condition.—When first seen he was excited and struggling between two men who were holding him. When they were told to leave him he sat down quietly and answered coherently when spoken to. He seemed dull and stupid, did not know the day of the week nor the month, did not know where he was. His memory was very defective. He seemed afraid about his wife, said that she would be sent to other men.

HISTORY OF CASE.—On the day of admission patient was placed in bed in a single room. He seemed dull and very confused, but was not violent, and was in the evening removed to the sick room, with instructions that he was to be kept in bed. He slept badly, but was quiet.

February 21st.—Breath very offensive and tongue foul. He was ordered Pil. Podoph., containing gr. ¼ of the resin, with Pil. Coloc. et Hyoscy., gr. 4. This caused free purgation. The stools were dark and bilious; the urine measured about 10¾ pints, and no albumen was found. The mental condition was one of quiet stupor unaccompanied by sleep.

February 22nd.—Slept better. The liquid ingesta being restricted, he passed only 6½ pints of urine, which contained blood. On examination with cold nitric acid it was found to be loaded with albumen, to the extent of about one-third. Microscopic examination revealed epithelial cells in considerable numbers, crenated blood-cells, and epithelial and granular casts from the renal tubules. Sp. gr. 1008; temp., M. 101·5, E. 101·0. Patient's mental state unchanged. He dozed a good deal, and seemed very drowsy. His memory was very bad; he did not remember reporter, though he had seen him only a few minutes before, and he had no idea where he was. His delusions about his wife persisted, and he was very anxious to see her. At the instigation of the reporter he tried to write to his wife. This he did sensibly and coherently, but very shakily, and with difficulty in remembering words. He was put on nourishing diet, with custard, and barley water *ad lib.*

February 22nd, 1886.
The Murray, Perth.

My Own Darling Wife,—I wish you would call up here and see me, for I do not understand what all this means. Come up as soon as you can. I will not write more just now, but will tell you all when I see you. Do come immediately.

I remain, my own darling wife,
Yours very faithfully,
———.

February 23rd.—The urine had again increased to 11 pints, but patient was drinking a great deal of barley water. There were traces of albumen and fewer casts, probably owing to the dilution. He seemed a little better mentally.

February 24th.—He was considerably better after a good night's rest; his temperature was reduced to 98·4 in the morning, 99·6 in the evening. He passed 13 pints of urine of the same characters as before. Mentally he was much improved. He spoke quite rationally, inquired affectionately about his wife, said he had thought most unworthily of her, that he remembered his delusions regarding her, and was now quite free from them.

February 25th.—Little change; the temperature rose in the evening to 100·8, the pulse to 105. The urine measured 15 pints, of sp. gr. 1003. Albumen only existed in a very slight trace. During the day he consumed 13½ pints of fluids.

February 26th.—He seemed slightly better, but the aphasia, with difficulty of pronouncing words, still persisted, though lessened. On carefully tapping his head it was found that there existed a tender area over the left coronal suture, about its centre, and about one inch square. There was no permanent headache at this or any other part. The tongue was still foul and dry, and the appetite weak. Urine measured 19 pints, was of sp. gr. 1005, and contained a proportionately larger quantity of albumen. Total of fluids consumed was 16½ pints. Temp., M. 99·9, E. 101.

February 27th.—Temperature was somewhat lowered, being—M.

99·8, E. 100·4; while the pulse was 98 and 108. The urine measured 18 pints, and was of the same characters as on the 26th. The fluids consumed measured 14 pints 2 ounces? Pot. Iod. gr. 10, ter in die, prescribed.

For the next few days the condition varied very little. The quantity of urine was from 6 to 10 pints. The decrease was owing to the fluids consumed being limited to six pints.

February 28th.—The last traces of albumen disappeared from the urine. The temperature varied from normal to 100°.

March 4th.—Considerable improvement, mental and physical, was manifested. His temperature was normal, and remained so in the evening; his appetite, which had heretofore been very poor, began to improve, and he seemed stronger. The memory remained very bad. He kept continually complaining of the fluids being restricted, and would beg one of the other patients to bring him a cup of water.

March 6th.—As improvement continued, he was allowed up for a little. He seemed refreshed by the change, but was very weak and shaky; he could not stand on one leg, and was very unsteady if his eyes were shut. From this time he steadily improved; his memory and mental faculties gradually, but very slowly, became stronger, and his temperature and pulse remained normal. The urine, however, kept about 10 pints daily, and rather increased than decreased, because while he was up and about the fluids consumed could not be so absolutely restricted. His tongue also remained foul, and his appetite not so good as it ought to have been.

March 12th.—He was removed to the convalescent ward. Here he continued to gain strength mentally and physically, but continued to wet the bed at night and pass a great deal of urine.

March 19th.—He was kept under observation for 24 hours, and his urine measured, when it was found to amount to 22½ pints of sp. gr. 1003, and to contain no albumen or sugar. The fluids consumed measured 20 pints, and even then patient complained of thirst. He was now granted full parole within the grounds.

March 24th.—Patient was put on three pints of water daily. He continued to improve, and weighed 2 lbs. heavier than on admission.

From this time patient continued to improve slowly but steadily, and increased in physical strength. His memory became very much better both for recent and remote events, but he said that the first three weeks after he came here seemed to him like a dream, and he could hardly remember anything that occurred during that time. He was gradually able to take long walks and visit friends in Perth, which he did frequently.

April 26th.—Was still improving steadily, but the polyuria continued and he constantly wetted the bed. The exaggerated patellar reflex and ankle clonus were still present, and his appetite was poor. His hand was much steadier, and he could now play a good game at billiards.

May 10th.—As the improvement had continued, and he was very well mentally and physically, with the exception of the polyuria and the weakness of occasionally wetting the bed, he was discharged on pass for one month. On the day of leaving on pass his physical condition was very good, he was strong, his limbs were muscular and firm, his eyes were normal, the fundus clear, and the vessels natural; but the thirst and polyuria continued with the exaggerated patellar reflex and slight ankle clonus. He was instructed to continue the Potassic Iodide in 15 gr. doses three times a day. From the first day of admission there was never any excitement. He went to the country with his wife and improved still further; the polyuria diminished and with it the thirst. On June 10th he was accordingly discharged from the books recovered, with instructions to carry on the course of Potassic Iodide under medical observation, and to be strictly regular and temperate in habits. On July 20th the accompanying letter was received, affording a marked contrast in steadiness to that dated February 22nd, 1886.

Mental state on discharge.—Memory very good, patient read intelligently and with interest, and talked intelligently upon many subjects. He seemed only weak in one thing—he could not overcome his desire for water; the thirst overcame his power of self-control.

19th July, 1886.

Dr. Urquhart,

Dear Sir,—Many thanks for your kind letter, which reached me here this morning, and I am glad to be able to inform you that I am still keeping well and persevering with my medicine, which I take three times a day.

I am, dear sir,
Yours faithfully,
———.

Nov. 11th.—At this time he continues perfectly well, is able for his work, and writes in good spirits.

At first sight both these cases resembled general paralytics in a striking degree, although neither presented the more common symptoms of expansive delirium. It was only on a thorough study of the symptoms and a searching investigation into their past history that the diagnosis was fully established. In both cases there was an absolute denial of syphilitic infection at first, and the wives would scarcely admit irregularities of life, although fully aware of the pressing importance of appropriate treatment and an accurate forecast of the future.

We have fortunately accumulated in the records of brain-syphilis a set of differential symptoms, the observance of which serves to guide us in forming a correct diagnosis in these perplexing cases. And if, in spite of inaccurate or insufficient evidence as to actual syphilitic infection, we arrive at the con-

clusion that the symptoms point to that cause, there can be little doubt that active specific treatment should be fully tried. I am not aware that evil results have been recorded as following the use of Potassic Iodide with or without Mercury and Counter-irritation in cases of general paralysis. Until experience proves it wrong I shall therefore continue so to treat every doubtful case.*

Dr. Wille ("Journal of Mental Science," 1873), points out that the mental symptoms often occur *after* the motor and sensory derangements. He remarks on the unfavourable prognosis, when convulsions, epileptiform attacks, and fits with loss of consciousness set in, although, even then, a cure may be effected. Erlenmeyer, however, dissents from this very bad prognosis. Dr. Wille has seldom observed monomania of grandeur in syphilitic mental disorder, and notes that partial paralyses are pretty frequently found in these diseases, while they are seldom observed in cases of true general paralysis of the insane.

Dr. Müller has pointed out ("Journal of Mental Science," 1874) the leading points of differential diagnosis between syphilitic disease of the brain and general paralysis. He insists on the importance of persistent headache and hyper-æsthesia in the first named, also on the curability of brain syphilis—although it is a somewhat roundabout means of diagnosis to place the curative treatment in the first place.

Dr. Braus ("Hirnsyphilis," 1873) collected 100 cases of brain syphilis, and remarks that the cerebral symptoms generally appear at a considerable time after infection. Among the points mentioned by him headache and weakness of memory have a prominent place. A large proportion suffered from incomplete paralysis of various nerves, and in 45 out of 100 there was mental derangement.

Dr. Mickle has treated the subject of intra-cranial syphilis at length ("Brit. & For. Med. Chir. Review," 1877), and points out the frequency with which in these cases marked motor or sensory disorders precede the mental symptoms—usually of acute mania or hypochondriasis. Optic neuritis, and paralysis of individual cranial nerves are valuable signs, and in more advanced cases the affection of the speech is paralytic rather than "of the nature of mingled weakness and inco-ordination," and when dysphagia occurs it is usually sudden. These and similar points agree with the description of the cases I have

* See "Mickle on General Paralysis," 1st Ed., p. 172.

laid before you, but in other directions Dr. Mickle's experience does not tally with them. For instance, he says ("General Paralysis of the Insane," 1st Ed., p. 72)—Palsies are often complete, limited, and independent of convulsive action in syphilis, and again, the motor impairment of limbs is usually paralytic, localized, and unilateral. In the first case the paralysis was incomplete and convulsive as regards the head, and the gait was as ataxic as any general paralytic.

Dr. Hughlings Jackson, ("Journal of Mental Science," 1874) lays stress on the valuable evidence of syphilis obtained in the clinical course of the case, and says that "a random association or a random succession of nervous symptoms is a very strong warrant for the diagnosis of syphilitic disease," and the value of this dictum is evident on a brief investigation of the above detailed cases.

Finally, I have placed the chief symptoms of X. and Z. in parallel columns for ready reference.

X.	Z.
Age 46.	Age 34.
No hereditary neurosis.	No hereditary neurosis.
Dissipation and syphilitic infection eight years ago.	Dissipation and syphilitic infection 1½ years ago.
Miscarriage of child.	Miscarriage of children.
Delirium Tremens recently.	Tremors of hands.
Headache intense and recurrent.	Headaches intense and persistent. Tendernesss of head on percussion.
Pulse slow.	Pulse rapid.
Left hemiplegia transient.	Epileptiform fits.
Delusions of suspicion.	Delusions of suspicion.
Ideation slow.	Ideation slow.
Memory good.	Memory bad.
Acute mania following other nervous symptoms.	Acute mania following the other nervous symptoms.
Thickness of speech. Dysphagia.	Thickness of speech. Aphasia.
Paresis of lower limbs.	Paresis of limbs.
Not observed.	Patellar reflex exaggerated. Ankle clonus present.
Irregular pupils. Flashes of light.	Regular pupils, congested disc.
Urine containing amorphous urates.	Polyuria, incontinence, albumen, blood. Thirst intense.
Recovery from mental symptoms rapid.	Recovery from mental symptoms rapid.
Recovery from paralysis gradual.	Recovery from paralysis gradual.