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By CHARLES VINES, Esq., Surgeon,

I.—DISEASES OF THE NERVOUS SYSTEM.—*Epilepsy—Cerebral Softening—Nervous Depression—Tetanus—Hydrophobia—Mania—Spinal Irritation.*

Mr. President and Gentlemen,—

In appearing before you this evening to fulfil the task imposed on me by your kindness at the last meeting, from which I was unfortunately absent, I must confess how little qualified I feel for the undertaking, but I should be ungrateful were I not to respond to your call,—ungenerous, were I to flinch from a duty which others have so willingly performed.

To give form and expression to the spontaneous efforts of one's own mind, is, perhaps, less difficult than to decypher and arrange the ideas of others; but this part of the work has been greatly facilitated through the labours of our esteemed secretary, Dr. Woodhouse, to whom we are very much indebted, not only for the industry and talent displayed in the arrangement of the minutes, but for the punctuality, zeal, and kindness of that gentlemen, in the performance of a duty involving so considerable a share of time and trouble. Trusting then that you will, pass over my imperfections, (for I fear I shall scarcely do justice to all the communications,) and stimulated by the bright example of my predecessors, whose annual addresses have afforded us so much pleasure, I cheerfully undertake to bring before you, in as concise and clear a manner as I can, the proceedings of our Society during the past year.

The Reading Pathological Society has now completed its first septenary, and I appeal to the members present if, during the seven years of our existence, much mental gratification, and I would fain add, profit, has not been derived from our periodical meetings and transactions.

We must each, I think, be sensible of some hint received,—of some knowledge gained from our fellow-labourers, in the same field. Besides acquiring a familiar acquaintance with the pathological specimens constantly presented to us, we arrive at the proximate cause of disease, and are enabled to wield our weapons, and apply our researches, with greater precision. Mr.

Simon, of St. Thomas's Hospital, in his inaugural address, says,—“Eminently true is it of our profession, that the fears and solicitude with which we approach the treatment of disease are in exact proportion to our ignorance of its causes; as these escape us we are bewildered and alarmed; as we detect them we are reassured and encouraged.”

I will proceed, now, to the history of the cases, morbid specimens, &c., taking them in the order followed by my predecessors.

I.—DISEASES OF THE NERVOUS SYSTEM.

Our reporter of last year had occasion to regret that there existed a paucity in the details of this class of diseases; this year the report of nervous diseases has been both numerous and interesting.

Epilepsy.—On the 28th of July, 1847, Mr. Walford made some remarks on a case of epilepsy. A man, suffering from severe attacks of that malady while under the care of Mr. Walford, was transferred to Mr. J. Workman, the district surgeon. The patient recovered so far as to be able to go to work in the hay-field, after which he was one day seized with violent convulsions, and died the next morning. On examination after death, the brain was found extensively diseased. The case was interesting, as showing the great amount of disease which may co-exist, with very slight impairment of the mental functions. Mr. J. Workman, who made the *post-mortem* examination, stated that the membranes of the brain were much thickened; there was a large abscess of the substance, and a quantity of recent blood had exuded from the ulcerated vessels.

Cerebral Softening.—Dr. Cowan remarked that the most constant symptom he found in similar cases, was an unceasing pain of the head; sometimes localized, at others diffused, with great tendency to coma. He mentioned an analogous case, in a young lady, of strumous habit, aged 25. About six months before death, she had pleuro pneumonia on the right side; three months after a similar attack in the left. After this she complained of distressing headache, particularly about the ears; delirium; difficulty of swallowing; great irritability of the vocal organs, with tendency to talk. The *autopsy* showed much venous congestion of the brain, with a small portion of fluid in the ventricles; softening of the internal structures, the optic thalami, septum lucidum, and fornix, with great congestion of the choroid plexus and velum interpositum; the lungs universally adherent, and milliary tubercles.

studded throughout their substance. She died in a fortnight.

This case is an important one, and gives rise to an interesting physiological question,—was the lung disease dependent on vitiation of the cerebral organ? Experiment proves that pneumonia will follow an injury of the par vagum.

Nervous Depression with Delirium.—On the 25th of August, 1847, Mr. Harrison read the following cases, which had recently occurred in his practice:—

Case 1.—A railway engineer, addicted to spirit drinking, was seized suddenly with convulsive fits, probably epilepsy; subsequently vomiting, extreme exhaustion, and delirium tremens. The treatment consisted in the administration of ammonia, potash, and opium; mustard cataplasms to the epigastrium; beef tea, and brandy and water to support the failing powers. He became comatose, and died somewhat suddenly on the third day.

Case 2.—A young man suffering from a severe attack of pleuro-pneumonia, was treated antiphlogistically for ten days, during which the chest-signs daily improved; he then commenced taking the hydriodate of potass. Five days afterwards, sudden prostration, rapid pulse and delirium came on, threatening speedily to annihilate the vital powers. Stimulating cataplasms and liniments were applied to the surface of the body; wine, brandy, and beef tea freely administered internally. The nervous equilibrium was thus restored, and the patient eventually recovered.

Case 3.—Mr. Harrison was called during the night of August 7th, 1847, to Mr. B., who had been drinking brandy and water for nine days and nights consecutively, and taking no food. The symptoms were stupor, heat of head, vomiting, full pulse, dry and furred tongue, constipated bowels, urine free and clear. The treatment consisted of effervescing medicine, with ammonia and small doses of tincture of opium, beef tea, with a limited supply of brandy, cold affusion of water on the head, mustard and bran cataplasms to the stomach, and aperients. As the stomach continued irritable, enemata were exhibited. The patient continued in this state five or six days, but gradually losing strength. The matters vomited became like coffee grounds. The catheter was required, and the urine found to be highly albuminous. Low muttering delirium took place, and the extremities began to get cold; the head was still hot; face red; eyes ferretty; pulse full. Dr. Cowan, who now saw him, in conjunction with Mr. Harrison, proposed cupping to a few ounces at the nape of the neck, and croton oil. The pulse fell, slight convulsions occurred, and the patient somewhat rapidly sank.

The recital of these interesting cases elicited the following remarks from Dr. Cowan, who, having visited the last case, said that delirium and depression from the use of ardent spirits, were happily, not often met with now in this neighbourhood; but in America, where they had opportunities of studying every phase of its character, it is said by some writers to have a certain period or course, and that it generally terminates in seventy-two hours, or three or four days if left to itself;—that when opium does good it is within the

first twenty-four hours; but that this drug was not now found so generally useful, or so much relied on as formerly.

Traumatic Tetanus.—Although the two following cases might, perhaps, have been more properly classed with the surgical or accidental cases, I have thought it better to place them here:—

On the 22nd of September, 1847, Mr. May read two interesting cases of traumatic tetanus, which had recently been treated by him in the Royal Berkshire Hospital. The first, that of F. P., was admitted with a wound from a hook below the axilla, by which the inner head of the triceps was lacerated. On the tenth day, symptoms of tetanus set in. The line of treatment pursued was anodyne, with æther, prussic acid, tobacco, and electricity, but without benefit, death resulting on the 6th day, which is the usual period, or within the tenth. The second case was that of J. H., who received an injury to the finger from an iron nipper. The finger was removed a few days after. Tetanus set in on the tenth day after the accident, and third after the removal of the finger. He died on the seventh day of the disease. On examination after death all the viscera, with the spinal cord, were found healthy.

Mr. May, in his remarks, said that these were cases of simple traumatic tetanus, as distinguished from the inflammatory form. The disease occurred about the usual period,—viz., the tenth day; and before the wounds were healed, which is generally the case, there was the præcordial pain, which is said to be pathognomonic of the disease, though denied by Dr. O'Beirne, of Dublin, who says there is a particular expression of countenance, which he considers peculiarly indicative of the malady. Dr. Parry, of Bath, states, that if the pulse remain below 100 up to the fourth day, the case will recover; but this opinion was not verified in the foregoing instances. Mr. May thinks Dr. Parry may not have distinguished the inflammatory form from the irritative. Æther and tobacco were used, without benefit. Electricity afforded no essential relief. This is not a new remedy, some gentleman wrote upon it hundred years ago; and Mr. Adams has recorded two cases which appeared to derive benefit from it. Opium has been largely used in this malady, but not with the same confidence as formerly. Dr. Budd speaks against it, says it stimulates the cord. Mr. Francis, and others of large experience, are not in favour of it. Hydrocyanic acid is said by Mr. Curling to be a stimulant of the spinal cord also. The mode of death was by syncope and exhaustion. There was none of that spasm of the glottis in this case, which is often said to be the cause of death, so as to suggest the opening of the trachea. On inspection after death there was ecchymosis of the muscles of the back, different from the usual effect of gravitation. There was some congestion of the vessels of the cord and membranes, but no inflammation nor softening of the cord itself, which justifies the notion that it was irritation, not inflammation. Mr. May was inclined to coincide in the general opinion that tetanus is a functional disease of the nervous system, particularly of the motor tract. In these cases there was no fever, delirium, or acute spinal

pain, which, probably, *would* have been the case, had there been inflammation of the cord or its membranes. As to the local treatment, Mr. May is favourable to amputation, where the operation can be performed without risk, which opinion is somewhat confirmed by the cases given by Dr. Wallace, of Dublin. The division of a nerve or nerves has been also recommended. Mercury is generally useless or injurious in the irritative form, but of great benefit in the inflammatory. Cold affusion has been used, but without any benefit. Warm baths are generally used, but were of no service here. Carbonate of iron has been recommended by Dr. Elliotson; his cases were, probably, idiopathic.

Professor Sewell, who was present on the occasion, said he had heard of cold affusion having been used by Dr. Jackson, in 300 cases, without benefit. In horses, where tetanus after injury is a frequent occurrence, he would recommend the excision of the nerve in every case. A drummer at the Cape was treated successfully, by division of the nerve. Professor Sewell once injected tepid water into the jugular vein of a horse labouring under tetanus: it produced perspiration, purging, and immediate recovery. He had not used medicated injections. He had used "*woorara poison*" in three cases. Artificial respiration should be kept up for four hours. *Ætherization* had no effect. In all horses the natural beat of the pulse was 32 in a minute; when at 40 he abstracted blood. Warmth was well supplied, or produced by a fresh sheep-skin, and blanket clothing. He used setons along the spine, but *not* the cautery. The spinal marrow in tetanus was congested *not* inflamed. He had more confidence in the injection of warm water after the division of the nerves than anything else. In hydrophobia, he added, transfusion was our only chance. He should take away as much blood as possible, (believing it to be poisoned,) and then transfuse fresh blood from another animal. It was only necessary to transfuse half the quantity of that taken away. He believed that the carnivorous species alone were liable to hydrophobia, and that it originated in dyspepsia. It was very important to bear in mind, that a dog might transmit the disease, without at that time showing it himself. In hydrophobia there was intense inflammation of the spinal cord, of the nerves wounded, and also, but in a less degree, of the brain itself. He kindly promised to present to the Society some drawings shewing the pathological states and differences of tetanus and hydrophobia.

On the 20th of October, 1847, Professor Sewell exhibited drawings of the spinal cord in tetanus and hydrophobia. In the latter instances, the cord, nerves, and membranes, were highly inflamed. In the former they were only congested. When the bite was in the hind extremities of an animal, the inflammation was most intense about the sacrum; when in the fore limbs, it was most violent in the anterior parts. One specimen shewed the violent inflammation of the interior of the column, and of the nerves proceeding from it, while the exterior was white. Another drawing exhibited a good deal of black deposit on the upper part of the column, in two coach horses, who were bitten by a dog in the same night, and who died within twenty-four hours of each other. A third

drawing represented the interior of the heart, where there was a large clot of blood effused beneath the endocardium, which he invariably found in all cases of sudden and violent death, tetanus, hydrophobia, or from over-exertion. There was also a view of a portion of the spine of an infant, bitten by a puppy which was *not mad*, yet hydrophobia followed, of which the child died. He enumerated five instances of the disease produced by dogs, who presented *no* signs of madness, yet hydrophobia followed their bites. Rats, in a state of excitement, and cats, will produce hydrophobia by their bite.

A vote of thanks was unanimously accorded to Professor Sewell for his valuable drawings, with the hope that he would favour the Society with his presence as long as he remained in the neighbourhood, which he kindly promised to do.

Mania.—On the same evening Mr. May called the attention of the Society to the subject of mania, and among other interesting cases, related the following:—

A clergyman in the neighbourhood was seized with mania, whilst performing service in the church. He became perfectly deranged, at first believing himself to be the Saviour come to judge the world. Afterwards the mania degenerated into the lowest form, using the most obscene language. He died in ten days. About the third day of his illness, a sister, who resided in Hampshire, came to see him. She became affected with mania, and precisely the same symptoms were manifested. Mr. May considered the latter case hysterical, poured cold water on the head till an impression was made on the system, and then gave a drachm of laudanum. In two hours the patient fell into a sound sleep, which lasted several hours, and awoke quite recovered. There has been no return of the symptoms. On examination of the brother after death, the brain was found to be highly congested, but not inflamed.

We have cause for congratulation that the treatment of mental diseases has received far more attention than formerly, and in proportion have the results been more successful; that the strait waistcoat and other more severe means of restraint, are not now the remedies to be relied on, but a higher and more refined system of treatment, the moral and religious training of the mind.

Spinal Irritation.—On the 24th of November, 1847 Dr. Wells read an interesting and practical paper on spinal irritation. After alluding to the frequent occurrence of the complaint, he mentioned the presumed causes:—1st. An alteration in the capillary circulation of some part of the cord. 2nd. Rheumatism, affecting the cord, locally or generally. Dr. Griffin's views were next examined, as to the source of irritation—the origin of the morbid process, which he believes to exist in the cord itself. Dr. Wells very much doubts whether spinal irritation be ever a primary idiopathic affection, and says, may it not be rather presumed that it owes its origin invariably to an impression made upon the incident excitator nerves, coming from a viscus, the subject of a morbid irritability, and that all the anomalous effects are produced through the reflex functions of the spinal cord? Among the cases selected to elucidate this view of the subject, was one in which

the spinal irritation owed its commencement to indigestible food taken into the stomach,—others in which the derangement of the catamenial functions was supposed to have originated the spinal affection. The limits of the present address will not allow me to notice this excellent paper more in detail.

(To be continued.)

CASES OF OXALURIA.

By P. MARTIN DUNCAN, M.B., Physician to the Essex and Colchester Hospital.

The following cases, with several others of which I could not obtain notes, have come under my notice, during the last three months. With one or two exceptions, the disease was of long standing, but yielded readily to the treatment so ably recommended by Dr. Golding Bird.

CASE I.

Sarah Watts, aged 23, single, subsists by washing, and is necessarily exposed to considerable variations of temperature. Before her illness she worked long and late, had no regular time for her meals, and but a scanty and not over nutritive diet. In April last her appetite failed her, she suffered from pain in the stomach after eating, and was rarely free from frontal headache, nausea, and a sensation of weight in the loins. These symptoms persisted until the 28th of July, when she came under my care.

She is a stout well-made woman, with regular uterine functions; has a sallow and depressed expression of countenance, and slightly jaundiced conjunctiva; tongue large, fissured, and red at the tip; mucous membrane of the lips rather colourless. Has little or no appetite; suffers greatly from gastralgic pains, and has a constant sensation of nausea. She sleeps badly; has severe frontal headache; is morose, desponding, and very irritable; bowels open daily; organs of respiration and circulation healthy; no increase in size of any of the abdominal viscera. Has a constant sensation of uneasiness and weight in the loins, and passes a considerable quantity of amber-coloured urine, of specific gravity, 1.016, which deposits, on standing, a slight cloud of mucus. The microscope distinguished numerous crystals of the oxalate of lime, numerous nucleated cells, and a quantity of amorphous urate of ammonia. The urine examined was passed in the middle of the day. Ordered her a light and mixed diet, to leave off work, and to take, every other night, Pil. Hydrarg., gr. v., formâ pilulæ. R. Acidi. Hydrochlor., Acidi Nitrici, utr., m. ij; Infus. Quassiae, oz. j. Misce fiat haust ter.

July 31st. Feels much better; pain in the head and loins less. Rept. medicamenta

August 7th. Greatly improved; no trace of the presence of the oxalate. Pergat.

14th. Feels nearly well. Omitt. Pil. Hydrarg., et capt. Pil. Rhei. Co., gr. x.

21st. Complains of gastralgia, otherwise looks well; has a good appetite; urine acid, of specific gravity

1.019; no oxalates. R. Argenti Oxidi, gr. $\frac{1}{2}$; Extr. Hyoscy., gr. iij. Fiat pilula j., ter die capienda.

The next report finds her well.

CASE II.

Sarah Clarke, aged 48, has suffered for five years from psoriasis in the face, and of late has lost flesh and appetite. She has been constantly under medical treatment, and has been but little benefitted. When I first saw her, she was taking senna and aloes during the day, and a diaphoretic at night. She has a good rotundity of figure, regular catamenia, and appears to have suffered a martyrdom from dyspepsia. She complains of severe frontal headache, flushes of heat in her face, dull aching pains in the loins, and total loss of appetite. Her tongue is foul, breath foetid, and bowels constipated; sleeps badly, has horrid dreams, and generally feels a sense of impending evil. Has not energy to work, nor to keep her person over clean. Ordered her to bring me some of her urine, and in the mean time to take Mist. Gentian. Co., oz. j.; Magnes. Sulph., dr. j. Fiat haust. ter die sumend.

August 28th. Much the same; the bowels, however, are well open; tongue clean; eruption in face not so well. Urine passed in considerable quantities, pale, acid, of specific gravity, 1.024; contains a great number of octohedral crystals of the oxalate of lime, little epithelium, and a considerable quantity of urate of ammonia. Ordered a light diet. R. Acidi Hydrochlor., Acidi Nitrici, utr., m. iij.; Infus. Quassiae, oz. j. Fiat haust. ter die sumend.

September 11th. Has improved greatly during the last fortnight. Her general appearance is much improved, her spirits are better, and she says her desponding thoughts have left her. Pain in the loins and head gone; bowels regular; eruption in the face persists. Urine pale, acid, of specific gravity, 1.016, contained urates, but no oxalate of lime.

23rd. Discharged cured.

CASE III.

Jane Taylor, aged 19, has been ill for some months, but never thoroughly well during the absence of the catamenia, a period of three years. Has been out at service, and having had the care of several heavy children has suffered accordingly. She is a tall slow-moving girl, silent and sulky, answering with manifest disinclination. Suffers constantly from frontal headache and intense pain in the stomach after eating. Pain in the loins and weakness in the legs are also prominent symptoms. Sleeps well but rises unrefreshed; her appetite is very great, and gives her no satisfaction; says she passes a large quantity of urine, being frequently obliged to get up of a night to do so. Bowels constipated; skin dry and harsh, and says she never perspires; pulse 108.

Before I saw her she had been treated for diabetes, and had taken considerable quantities of opium. She was still at service and had to undergo considerable fatigue. I continued the treatment until I obtained some of her urine. I found it acid, pale, containing a great quantity of fawn-coloured lithates, of specific gravity 1.026, and large crystals of oxalate of lime.