LECTURES

ON THE

PATHOLOGY, DIAGNOSIS, AND TREATMENT OF BRIGHT'S DISEASE.

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LECTURE VII.—THE TREATMENT OF ACUTE AND CHRONIC BRIGHT'S DISEASE.—(Concluded.)

THE treatment of chronic Bright's disease must obviously vary according to the form and stage of the malady and the nature of the secondary complications. In each case, it is practically important to ascertain, if possible, the probable cause of the renal disease. Your inquiries should be directed to determine whether the chronic malady is a sequel of an acute attack, or whether it commenced as an insidious chronic disease. Then you should make inquiry as to the exciting cause, which in most cases may be arrived at with a high degree of probability. Is there a history of gout, or of habits likely to induce a gouty diathesis? Excessive eating and drinking, chronic dyspepsia, frequent exposure to cold and wet, cachexia the result of syphilis or of other constitutional disease, scrofula or other possibly hereditary taint, and chronic lead-poisoning, are amongst the probable determining causes which should be made the subject of inquiry; and then the treatment should be directed to remove, if possible, or, so far as may be, to counteract, the morbid influence.

Whatever may be the form or the stage of chronic Bright's disease, the skin must be protected from cold by warm woollen clothing, care must be taken to avoid over-fatigue, and the diet should be carefully regulated both as to quantity and quality. As a rule, in all cases of chronic renal disease, alcoholic stimulants in any form should be given sparingly, or abstained from entirely, unless, for some special reason, they appear to be indicated. You will find that, when there is extensive degeneration of the kidney, alcoholic liquors usually produce far more decided, durable, and often deleterious effects, than result from equal quantities of the same liquors when the kidneys have their normal structure and functional activity.

In one class of cases—cases of large white kidney, with a scanty secretion of highly albuminous urine—dropsy is usually a prominent symptom, and requires special treatment. The tendency to dropsy is no doubt increased by the dry and inactive state of the skin, which often resists the relaxing effect of external warmth, so that a hot-air bath, or even the hottest room of a Turkish bath, fails to excite diaphoresis. Patients who do not perspire under the influence of the hot-air bath, usually complain of painful throbbing in the head, difficult breathing, and other distressing symptoms. On this account, I prefer in most cases the wet sheet and blanket bath, which, as a diaphoretic, is both more agreeable and more efficacious than the hot-air bath.

Diuretics are notoriously uncertain in their operation. In order to assist the action of diuretics, diluents should be freely given; and I have often obtained most satisfactory results by keeping the patient entirely on milk, either skimmed or unskimmed, in accordance with the rules which I have before laid down, with the addition of a mixture containing acetate of potash and infusion of digitalis, a drachm of each for a dose, to be repeated three times a day. By these means, a copious secretion of urine is induced, and the dropsy is speedily and completely removed. A strong infusion of fresh broom-tops, taken in sufficient quantity every morning to act as a purgative, often proves a very efficient diuretic. The succus scoparii of the *Pharmacopœia* may be substituted for the fresh infusion. The imperial drink (cream of tartar and lemon), in doses of from two to four pints in the twenty-four hours, is also a pleasant and efficacious diuretic. The late Sir James Simpson was the first to use the vapour of oil of juniper as a diuretic. Thirty or forty drops of the oil may be floated on boiling water in an ordinary jug or in a suitable inhaler; and the mixed vapours of the volatile oil and water may be thus inhaled twice a day. In some cases, the diuretic action is very prompt and decided. Another plan, originally proposed by Dr. Christison, is to apply digitalis freely to the skin. Dr. Christison's plan consists in making a strong infusion by adding an ounce of the dried digitalis-leaves to a pint of boiling water. A large piece of spongio-piline, steeped in the infusion, is kept constantly applied to the abdomen. An alternative plan is to pour an ounce of tincture of digitalis on the surface of a large hot linseed-

poultice, which is then applied over the loins and back; the poultice, with the tincture of digitalis, being renewed two or three times a day. This plan sometimes succeeds when other methods have failed to remove the dropsy.

The free action of a hydragogue purgative, such as elaterium, compound gamboge pill, compound jalap powder, or the powder composed of scammony-resin, cream of tartar, and ginger, which I have before mentioned, is often followed by a more copious secretion of urine. The probable explanation of the indirect diuretic action of a hydragogue purgative is this. The purgative excites a copious watery secretion from the blood into the bowel; this is followed by the absorption of a portion of the dropsical fluid which had been effused into the areolar tissue, and perhaps into one or more serous cavities. The partial absorption of the dropsical effusion removes or lessens the pressure on the vessels, more especially on the veins; and so the circulation becomes more free, at the same time that the absorbed liquid exerts a diuretic influence on the kidneys similar to that which we have seen to occur during convalescence from acute renal dropsy, and not unlike that which often results from the introduction of abundant diluents through the stomach.

When other means fail to remove the dropsy, when the anasarca distension of the legs is increasing and causing pain and incipient erythematous inflammation, or when the breathing is becoming impeded by the accumulation of water within the abdomen or the chest, or by an oedematous condition of the lungs, prompt, decided, and sometimes permanent relief, may be afforded by allowing the water to escape through an incision in the skin, about half an inch long, just above either the outer or the inner ankle of each leg. The incision must be deep enough to enter the areolar tissue beneath the skin. You are aware that, for incising dropsical legs, I am in the habit of using a small instrument made for me by Messrs. Weiss. It may be described as a cupping scarifier with a single blade, which, on touching a small knob, is thrust out by a strong spring, and thus makes a clean cut through the skin with such rapidity that it causes little or no pain. We had lately a good opportunity of testing the comparative painlessness of an incision made by this instrument. A dropsical patient had his legs acupunctured by the house-physician, and cried out with the pain caused by the needle-punctures. A few days afterwards, the punctures having ceased to discharge, while the dropsical swelling was but little reduced, we made an incision into each leg with the spring lancet. He declared that he scarcely felt the cuts; and the incisions discharged so freely, that the dropsy was for a time completely removed. I have seen many cases in which life has been prolonged for a considerable period, and some in which a complete and permanent cure has followed incision of the legs, after other means had failed to afford relief. To refer to one case only out of a number: towards the end of July 1861, I first saw a clerk to the New River Company, aged 22. Since the end of March, he had suffered from general dropsy, the result of exposure to cold. The urine became nearly solid with heat and acid, and it contained numerous oily casts. Purgatives and diuretics failed to lessen the dropsy; and at the beginning of September the swelling of the legs was so great, that the skin cracked, and water oozed through the fissures. I then advised that the legs should be incised. A copious discharge of water occurred, and the urine became more copious. From that time, he steadily improved, the dropsy passed away, and gradually the urine ceased to be albuminous; but it was not until the end of April 1862, more than a year from the commencement of his illness, that all trace of albumen had disappeared. The chief medicinal treatment after the incision of the legs consisted in giving the tincture of perchloride of iron three times a day, and a dose of strong broom-tea every morning. Since his recovery, he has insured his life, he has married, and has several children. I heard of him quite recently as remaining well. I have thought this case worthy of especial mention, as an example of complete recovery after dropsy to an extreme degree, and albuminuria with numerous oily casts, had continued for the greater part of a year; the first favourable change in the patient's condition following directly upon a copious discharge of water through incisions in the legs.

After the dropsical legs have been punctured, the folded sheet and mackintosh, placed beneath to receive the serous discharge, should be frequently renewed, and kept clean. The liquid quickly decomposes and becomes ammoniacal, and in this state it may irritate and inflame the skin. Cleanliness is, therefore, essential for safety as well as for comfort. Any inflammatory redness about the wound may usually be removed quickly by the application of a lead lotion. It is true that severe inflammation and sloughing have sometimes followed incisions or punctures in anasarca legs; but this may, and often does, occur from over-distension of the skin, or from the mere pressure of the heavy dropsical limbs upon the bed. The result of my experience is,

that inflammation of anasarca legs has been as often subdued as provoked by acupuncture or incision; that inflammation is much less likely to follow incisions in cases of renal than cardiac dropsy, when the circulation is much impeded by valvular disease; and that an incision made with the spring scarifier is as safe as acupuncture, and much less painful.

The copious secretion of urine which usually follows a discharge of dropsical fluid through incisions in the skin admits of nearly the same explanation as that which I have already given you of the like phenomenon after the action of a hydragogue purgative. The escape of the dropsical effusion through one or more incisions in the skin, removes pressure from the veins, and permits the blood to move more freely through the vessels. This greater freedom of the circulation is attended by a quickened absorption, and some of the absorbed dropsical liquid, more or less charged with urea, enters the circulation, and exerts a diuretic influence on the kidney. In the treatment of a copious dropsical effusion the main object, and the chief difficulty, is to overcome the *vis inertiae* of the stagnant liquid. If once we can set the liquid in motion, whether by a primary diuretic action upon the kidneys, by first exciting a free discharge of liquid through the bowels, or by giving exit to a portion of the liquid through incisions in the skin—in which ever way the current is started—the outward movement of liquid often continues until the whole of the dropsical effusion has been swept away, and in each case a free secretion of urine constitutes a part of the eliminative process.

The anæmia of chronic Bright's disease is to be counteracted by a carefully regulated diet, and by the persevering use of one or other of the preparations of iron. When with anæmia there is a scanty secretion of urine, and a tendency to dropsy, a very useful combination is twenty minims of the tincture of perchloride of iron, with a drachm of spirit of nitrous æther, and a drachm of infusion of digitalis, or from ten to twenty minims of the tincture of digitalis in an ounce of water, given three times a day, soon after food. If the mixture be found to constipate, from half a drachm to a drachm of sulphate of magnesia may be added to each dose, or the bowels may be acted upon by an occasional dose of the compound colocynth pill. Mercury in any form often acts powerfully and injuriously in cases of Bright's disease. The chief use of mercurials in these cases is to assist the operation of saline or vegetable purgatives.

Syphilitic symptoms, when present, are best treated by gradually increasing doses of iodide of potassium, with bark, or quinine. The calomel vapour bath has been found a useful remedy in some syphilitic cases.

When chronic renal disease is associated with a strumous diathesis, cod-liver oil may often be given with advantage.

Dyspnoea is one of the most frequent and distressing symptoms associated with advanced Bright's disease. It has various causes, and requires various remedies. When it results from œdema of the lungs, or dropsical hydrothorax, it is best treated by the remedies for dropsy. In some cases, anæmia appears to be the chief cause of dyspnoea. The red blood-corpuscles are the oxygen-carriers. When the blood—whether in cases of chlorosis or of Bright's disease—contains an excess of water with a corresponding deficiency of red corpuscles, the defective oxidation of the tissues and the demand for air are manifested by hurried and laborious breathing. The remedy for this form of dyspnoea is to be sought for in the elimination of water, a carefully regulated nutritious diet, and iron as a restorative tonic.

When dyspnoea results from pulmonary congestion and bronchial catarrh, it is best treated by warm baths, fomentations, or poultices to the chest, and mild counter-irritants.

Paroxysmal dyspnoea, in many cases of advanced Bright's disease, appears to result from the influence of deteriorated and poisoned blood upon the nerves and the nervous centres. The heart's action is rapid and feeble, the breathing is distressed and hurried, while the respiratory murmur is loud, puerile, and unattended by wheezing or crepitating sounds. This form of dyspnoea is usually more common and more distressing at night. It is not improbable that, in some cases, cardiac weakness, with palpitation and dyspnoea, may result from excessive contraction of the minute branches of the coronary arteries, excited by the stimulant action of morbid blood, and causing anæmia and malnutrition of the muscular walls of the heart. These symptoms are most effectually warded off by a carefully regulated diet, by promoting the action of the skin and bowels, and so far as possible of the kidneys, the object being to free the blood from accumulated impurities. Temporary relief is often afforded by ether, or by brandy. In some cases, a small dose of chloral hydrate, not more than ten grains, repeated at intervals of six or eight hours, is very beneficial. The chloral has this advantage over every preparation of opium, that it has no astringent action on the bowels, and that it rather increases than checks the secretion of the kidneys. It therefore never excites the distressing sickness

which often results from the astringent influence of opiates in the advanced stages of renal degeneration. The muscular twitchings, and the painful cramps, which are common results of uræmia, and not unfrequent precursors of convulsions, may sometimes be kept off, or much mitigated, by twenty-grain doses of bromide of potassium, given twice or three times in the twenty-four hours. A combination of chloral hydrate with bromide of potassium appears sometimes to have a powerful influence in warding off uræmic convulsions.

Although the use of opium in all forms and stages of Bright's disease requires extreme care, on account of its tendency to check all the secretions except that of the skin, yet you will occasionally meet with cases in which the distressing nervous symptoms resulting from uræmia are relieved by opiates more effectually than by any other means. There are cases in which the carefully-observed result of a cautiously conducted experiment is sometimes a better guide than theory.

The sufferers from Bright's disease are always dyspeptics, and the gastric symptoms are often very obstinate and distressing. When, in consequence of renal degeneration, the blood is contaminated by retained urinary excreta, there is often a vicarious excretion of these impurities by the mucous membrane of the stomach and bowels. The gastric secretions are mingled with the ammoniacal products of decomposing urea; digestion is consequently impaired; there are flatulent distension of the stomach and bowels, nausea, vomiting, and diarrhœa. Relief is to be sought by a carefully regulated diet, and by giving with the food from ten to twenty drops of dilute hydrochloric acid with a vegetable bitter. The liquor strychniæ in doses of five minims, or the tincture of nux vomica in ten-minim doses, with a mineral acid, is sometimes especially efficacious. Pepsine may sometimes be given with advantage.

In some cases of advanced renal degeneration, the vomiting is so incessant, that the patient has to be sustained by nutritive enemata, while iced water only, or iced milk in small quantity, is taken by the stomach. In some instances that have come under my observation, the straining and exhausting efforts of vomiting have been checked only by frequent whiffs of chloroform vapour.

When the stomach is very irritable, chloral can rarely be retained, it acts at once as an emetic; but injected into the rectum, its soothing influence is very similar to that of chloroform vapour, while it has the advantage of producing a more durable impression on the nervous system, and therefore requires to be less frequently repeated.

When the retina is the seat of hæmorrhage, or of albuminuric retinitis, the eyes should be allowed to rest, and they should be carefully shielded from excess of light. Recovery of sight, more or less complete, may occur, but it is doubtful whether treatment has much influence upon the symptoms. My colleague Mr. Soelberg Wells, with whom I have seen several cases of this affection, strongly recommends moderate local bleeding by the artificial leech. When, on account of the anæmic condition of the patient, the abstraction of blood is undesirable, he has seen marked improvement follow the application of the dry cup to the temple, at intervals of five or six days. (*A Treatise on the Diseases of the Eye*. By J. Soelberg Wells. Second edition, p. 361.)

CASE OF STRANGULATED OBTURATOR HERNIA.

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JEMIMA H., aged 59, of rather spare habit and middling stature, acting as assistant matron at an institution for the reception of unfortunate or fallen women, called the Refuge, in this city, had been subject to occasional attacks, during the last two years, of pains across the bowels, with sickness and more or less constipation, from which she was relieved by mild aperients, injections, etc. On January 20th, I was called to her on account of one of these attacks, late in the evening; and, as she had used an injection with some success, I gave her a mixture containing liquor ammoniæ acetatis, tincture of opium, and compound tincture of lavender, to be taken every three hours till the pain abated. Next day, the attack had passed off; but she spoke of considerable uneasiness which she felt in the left thigh. On February 27th, the pain and sickness returned with renewed aggravation. Enemata with common salt, coarse sugar, and croton-oil, were given, with the hope of inducing downward action; and effervescing saline mixture with hydrocyanic acid and liquor opii sedativus, to abate the sickness. The treatment proved unavailing, and she sank exhausted on March 2nd.

On March 3rd, my son, who assisted me in the above treatment, took the greatest share in a *post mortem* investigation. The liver, spleen, and pancreas, were natural. We next examined the pyloric