

## PRACTICAL MEDICINE.

### ON CEREBRAL RHEUMATISM.

By DR. CORNELIUS BLACK.

In acute articular rheumatism, and especially when rheumatic pericarditis or endocarditis, or both, coexist, cerebral rheumatism is not an unfrequent accompaniment in the more urgent period of the articular disease. It is manifested by a busy, talkative delirium, occasional disposition to leave the bed, flushed face, not unfrequently bathed in perspiration, restless, sparkling eyes, and slight contraction of the pupils. With this form of cerebral rheumatism every medical practitioner is familiar. There is, however, another form of cerebral rheumatism which is probably of not less frequent occurrence, but which is not generally recognized, or if recognized, it has not, so far as I know, been described either in medical books or in the medical periodicals.

A case of this latter kind has very recently been under my care. The subject of it was a gentleman of middle life, of nervo-sanguine temperament, and of regular and temperate habits. From the age of fourteen to that of thirty-nine he passed through five attacks of acute articular rheumatism. In none of these attacks did the heart suffer. As in such subjects, so in him, migratory rheumatism was of frequent occurrence. In one such attack he suffered for some days from rheumatic pains in the ankles, loins, shoulders, arms, neck, and scalp, with no more marked disturbance of the health than a little indigestion. The urine was natural in quantity, deepish-yellow in colour, had a specific gravity of 1028, a strongly acid reaction, and deposited on cooling a large quantity of cayenne-pepper-coloured crystals of uric acid. About nine o'clock one morning, after expressing his freedom from rheumatic pains, he somewhat suddenly began to feel giddy and to complain of a sensation of weight and heaviness in the head generally and of a tendency to fall in whatever direction the head might be inclined. Occasionally the sensation of a whiz passed with electric rapidity through the brain from back to front. At other times a vertiginous sensation was referred to the vertex, when the gait became somewhat unsteady. His intellect was unclouded, he could indite letters as before, but if he had to think, his ideas soon became a little confused.

There was no increased heat of the head or of the skin generally, no nausea or vomiting, no injection of the sclerotics, no contraction or alteration of the pupils, no twitchings of the muscles of the face or of those of any of the extremities. In one or two previous attacks slight twitchings of the muscles of the cheeks and of the brow had occurred, a common result of migratory rheumatism. The breathing was easy, regular, and the number of respirations seventeen per minute.

The tongue was quite moist, but slightly furred, there was no thirst, the appetite for food was not sensibly altered, the bowels were regular. The heart and kidneys were healthy. The pulse, usually 70 in health, presented the peculiarity of now numbering only fifty-four per minute, a common result of depressed functional energy of the brain. It was regular, equal, soft, and rose beneath the finger with a slow, steady, measured beat. The quantity of urine voided within the first twelve hours was thirty-five ounces, but afterwards this proportionate ratio decreased, so that the urine did not exceed fifty ounces altogether for the first twenty-four hours. It was of a deep yellow colour, of acid reaction, specific gravity 1026, and was quite free from deposit after it had stood two days.

Perfect quietude was enjoined. Two pills containing two grains of calomel and eight of the compound extract of colocynth were administered, and their action was favoured by an effervescing draught containing tartrate of soda. Five liquid evacuations were produced. The general heaviness and giddiness of the head now merged into a sensation of diminished pressure over the left brow and an aching soreness confined to the left temple. This feeling shortly afterwards passed in succession to the muscles of the back of the neck, producing stiffness and more or less pain on motion—to the shoulders, wrists, back, thighs, and ankles, manifesting in each locality its usual character of rheumatism. With this transfer from the head the pulse rose to 62, 66, 70, 72; and the next quantity of urine voided let fall, on cooling, a somewhat copious sediment of urates, deeply coloured with the purpurates of Prout—the murexid of Liebig. For twenty-four hours this excretion of the urates continued, after which it gave place to an excess of both the alkaline and earthy phosphates, which continued for nearly two days. During this time the urine was natural in quantity, of a rich straw colour, specific gravity 1026, deposited on cooling a white woolly-looking sediment, and manifested an acid reaction, which was not at all influenced by the food taken. By heat the phosphate of lime was deposited in copious small balls and flakes, which were immediately dissolved on the addition of two drops of nitric acid, rendering the urine, as it is wont in such cases, brilliantly clear and of a faintly bistre light.

Here, then, was a case of migratory rheumatism affecting the brain-substance and giving rise to symptoms simulating some of those premonitory of apoplexy. Its real character, however, was shown by the immediate supervention of cerebral symptoms on the subsidence of the rheumatic pains in the ankles, and the disappearance of crystals of uric acid from the urine, and by the return of these pains to the neck, back, and limbs, and the deposit of urates and purpurates immediately after the head-symptoms had been

relieved. That the whole cerebral mass suffered is rendered probable by the general feeling of heaviness over the head, by the giddiness and the sensation of a disposition to fall in whatever direction the head was inclined, by the inability to think without causing confusion of ideas, and by the slowness of the pulse.

For such cases I have generally found a smart purgation by calomel, colocynth, and tartrate of soda the most effectual treatment. Colocynth exerts a wonderful power in causing the elimination of uric acid by the liver. To this effect the tartrate of soda contributes; but it, like all the alkalies, also favours the excretion of uric acid by the kidneys. Calomel with colocynth, the alkalies, perfect quietude of both body and mind, and a spare diet, are consequently remedies to be adopted in all such cases.

## SURGERY.

### THE ANTISEPTIC SYSTEM AT EDINBURGH.

By RICKMAN J. GODLEE, B.S., Surgical Registrar at University College Hospital.

(Concluded.)

During my attendance in Lister's wards, he sides a primary of a hip-joint, only four major amputations were performed, three of which healed without a drop of pus or the slightest constitutional disturbance. I subjoin the dates at which the dressings were changed in each of them. These facts speak for themselves, and show, not only how rapid is the cure in successful cases, but how much trouble is saved to the surgeon and his assistants.

W. B—, an adult man. Amputation of arm for ununited fracture of old standing. Operation Jan. 13th. Dressings changed Jan. 14th, 16th, 19th, 23rd, and 30th, and removed Feb. 6th. It was really healed by Jan. 30th.

J. B—, an adult man. Syme's amputation for injury (primary). Operation Feb. 9th. Dressings changed Feb. 10th, 12th, 15th, 20th, 27th, and March 6th and 15th.

W. W—, an adult man. Amputation of the forearm for disease of the wrist-joint, which had been previously cauterised and antiseptically incised, but, though painless and discharging only a very small quantity of serum, was rapidly reducing the patient's strength. He was also suffering from incipient phthisis; and immediately after the operation his appetite returned and he began to gain weight. Operation Feb. 11th. Dressing changed Feb. 12th, 15th, 22nd, and removed Feb. 29th. It was really healed on Feb. 22nd.

The other amputation was the ankle in J. W—, a youth of eighteen years, for advanced disease of the synovial membrane. It, like the others, had almost healed at the end of a fortnight without a trace of suppuration, and as the only cavity left was that occupied by the drainage tube, Mr. Lister departed from his general rule, and