fullness and tenderness in the left ham; and then the femoral vein in Scarpa's triangle was tender, prominent, and distinctly hard, and the change could be traced beyond Poupart's ligament. But there was very little oedema of the limb. He was kept at rest in bed. The mischief in the left limb gradually subsided; but, in the course of the third week, he complained of his right thigh, and the right femoral vein was found to be tender, swollen, and evidently plugged also, up to or even above Poupart's ligament; but no further mischief could be discovered in that limb. During the next week, he frequently complained of headache and heat, and his appetite failed, but there was no rise of pulse or of temperature. He was in the hospital nine weeks, during which time this evidence of fresh mischief slowly passed away; and, when he was discharged, hardly any abnormal condition could be discovered, either in the popliteal space or in Scarpa's triangle.

To what cause should the mischief be attributed in the following case? A young woman, aged 20, rather stout but of delicate aspect, was admitted into the hospital, complaining of much pain in the right leg. The whole limb was very slightly swollen, but the internal saphena vein stood out prominently, and could be distinctly traced with the eye almost from its commencement in front of the ankle to the middle of the thigh. To the touch, it was firm and cord-like throughout its entire course, and very tender. She told us that the limb had become painful a fortnight before her admission, and that the pain had gradually increased until she was hardly able to put her foot to the ground. Five months since, she was in the hospital suffering from the same affection of the same vein, with weakness and palpitation of the heart; but she recovered from this, the vein resuming its natural condition, and remained well until the present attack. Nothing amiss in the heart or elsewhere could be discovered. By rest in bed and warm fomentations the pain, which never appeared to be very severe, and tenderness gradually subsided, but the prominence and hardness of the vein remained. After being confined to bed for about three weeks, a bandage was applied to the limb, and she was allowed to sit up, and then to move about the ward. In another week, she was free from complaint, and able to walk without discomfort, but with a hard and prominent saphena vein. In the course of another week or two, however, before she was discharged, the vein apparently quite recovered its healthy state. Nothing unnatural could be detected by examination. During the time she was under observation, there was no perceptible derangement of her general health.

[To be continued.]

LOCALISATION IN SPINAL DISEASE:

ILLUSTRATED BY (1) A CASE OF "ATROPHIC PARALYSIS" IN AN ADULT; (2) A CASE OF CENTRAL MYELITIS:
(3) A CASE OF ALCOHOLIC PARAPLEGIA.*

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THE two remaining cases are introduced for the contrast they present with the one just narrated. The loss of power and atrophy of muscular tissue in the patients were as pronounced as in the subject of the foregoing case; but, in addition, the function of sensation was seriously involved, indicating an extension of the morbid process to the region of the posterior horns. The two cases, though occurring from different causes, appear alike in their nature so far as the spinal symptoms were concerned. The second of the two is one of those melancholy instances described by Dr. Wilks (*Med. Times and Gaz.*, 1868, vol. ii, p. 470; and *Lancet*, 1872, vol. i, p. 320), and also referred to by Dr. Lockhart Clarke in the latter volume (p. 427), under the title of alcoholic paraplegia, which they have observed more particularly among females. On the Continent, Dr. Wilks ascribes the malady specially to imbibition of absinthe. In this form of paralysis, the lower extremities are especially liable to be affected, as is illustrated by my patient.

Both cases have much in common with the form of central myelitis described by M. Charcot, in which the entire grey tract is implicated, and the sensitive function which is related to the posterior horn suffers with the motor. The patients, however, were free from the more formidable phenomena of paralysis of the bladder and rectum, and the tendency to rapid production of sloughs, described by that observer as often connected with this particular disease. In the second case, the cerebral disorders of chronic alcoholism were added to the evidence of spinal disease. In the first case, the early symptoms undoubtedly point to the membranes as being affected at the outset, and probably

some of the pain complained of by the patient was due to irritation of the posterior nerve-roots. These pains in the limbs, especially in the region of the joints, which constituted a prominent subject of complaint in both of my patients, are noticed by Dr. Wilks. They have no small importance in reference to diagnosis, from the danger to which they give rise of the case being mistaken for rheumatism by a hasty observer. M. Charcot has, however, added fresh interest to the subject, in connection with the localisation of disease, by calling attention to the peculiar character which certain of these pains present, clearly observable in the first of my two patients; viz., that of their occurring in paroxysms, and presenting a peculiar lancinating character, recalling forcibly the distinctive nature of the pains of locomotor ataxy. From these considerations, M. Charcot suggests that the presence of pains answering to this description points to the probability of the disease having reached that district of the posterior columns in which certain fibres from the posterior root of the nerves pass to the grey matter. This region M. Charcot distinguishes by the designation "la zone radicaire postérieure". This zone is distinguished from the remaining portion of the posterior column (the column of Goll) by being developed at an earlier period, and is the seat, as M. Charcot demonstrates, of those changes which produce the phenomena of locomotor ataxy. It is worth adding that Dr. Wilks observes that the symptoms in alcoholic paraplegia are sometimes confined to the legs, and resemble in character the symptoms of locomotor ataxy.

CASE II.—A. R., aged 38. She presented a good family history. She had never been rheumatic. The account she gave of herself disclosed the fact that she had probably suffered in early life from an attack similar to her present one, but followed by a still more protracted recovery. She stated that, when seventeen years of age, she was in Gloucester Infirmary for nine months with symptoms like her present ones. She had severe pains in her limbs, and her legs wasted even more rapidly than they did on the present occasion. She was in bed for nine months, and even at the end of that time "had no use in her joints". She could raise her limbs in bed, but was unable to stand or walk, or even to feed herself. It was two years before her recovery was complete. She also had sharp pain in the occipital region and over the eyes, and could not see to read. She married when twenty-three years of age, and has had five children and two miscarriages. She is free from any evidence of syphilis. She is much employed in carrying heavy bundles of catalogues to and from the printer's, and is often wet through. She refers to one particular occasion, when she got her feet wet with snow-water. An attack of bronchitis was the consequence, for which she kept her bed for five weeks; and it was during the course of this illness that the first symptoms of her present complaint appeared, about four months before her admission into the Birmingham General Hospital. Her complaint began with pain of great severity, apparently meningeal, across the loins, reaching round the lower part of the abdomen and in the flank, which often prevented her from rising after having seated herself. Her appetite left her; but she was not aware of having had fever, though she was subject to attacks of burning heat, which came over her suddenly three or four times a day, accompanied by a sense of great weakness. Then came on severe pain in the feet and ankles; and afterwards she felt pain in the hands and arms and in the shoulder-blades. These pains were entirely without swelling; she describes them as being like cramps. They would attack her shoulders unawares, and shoot down the arms, so as to make her drop anything she had in her hand. She also spoke of formication in the soles of the feet and in the calves. She also had pain through the head from side to side, which caused her to forget everything for the time. She was treated for rheumatism; but in a month after the beginning of the illness she began to lose power in the legs, the feebleness steadily increasing. At the same time, "the flesh of her legs fell away rapidly". For the month preceding her admission into hospital, she was quite unable to walk, and for the last fortnight she kept her bed. The muscular atrophy increased with the paralysis; but in time her arms shared in the loss of power, and for a month before she came under my care she could not hold her needle in sewing. Her breath, too, became short, probably from deficient power in the inspiratory muscles. Whilst able to walk, want of breath often compelled her to stop. It does not appear that the sphincters were weakened. Whilst in the hospital, she complained of some urinary irritation, probably accounted for by descent of the uterus.

At admission, four months after the beginning of her complaint, she presented the appearance of a sound constitution, though she was thin. She had a remarkably apathetic melancholy manner. When talking, she often shed tears, and spoke in a very low tone. I may at once state that this peculiarity of manner was very prominent through the greater part of her illness, but underwent a striking change when improvement set in. She was unable to stand or to raise her feet from the

* Concluded from page 122 of last number.

bed. Muscular power in the upper extremities was low. Both legs and thighs were greatly wasted, as will appear from the measurements to be given below. Faradic contractility was very low; in the arms, it was normal. The chest expanded less than three-quarters of an inch on forced inspiration. Sensibility in all its forms, including electro-sensibility, was greatly lowered in the lower extremities and abdominal parietes. It required a sharp thrust of the compasses to make their points felt; but the power of discriminating between heat and cold remained. Anaesthesia existed also in the upper extremities, but in a minor degree. The temperature in the axilla was normal. All her functions were performed naturally, excepting that menstruation had ceased since her illness began.

During the first six weeks of her residence, her symptoms showed no sign of improvement. The anaesthesia became more profound; muscular power still further lessened in the upper extremities, so that she could not retain anything long in her grasp without tremor in her arm and the certainty of dropping what she was holding. The deltoids also participated, and she could not raise her arms above the horizontal. Atrophy of the muscles increased, and the palmar eminences wasted, disclosing the metacarpal bone in the thenar eminences. Cutaneous sensibility was decidedly deadened in the fingers. She continued to make great complaint of darting pain in the blade-bones, shooting from shoulder to shoulder; and had constant paroxysms of pain starting from the fingers and darting to the wrists, leaving the hands numb. In addition, her feet and legs were numb, and she was kept awake by pains in the knees and ankles and up the leg-bones. She never presented any evidence of the exalted reflex irritability nor of the spasmodic movements of meningitis; nor was there any pain in the vertebral region. She was remarkably intolerant of the impression of cold, and "could bear any quantity of clothes". Her appetite continued defective, and her spirits depressed. Her bowels were costive.

The treatment had consisted of blisters on the spinal region; the full administration of iodide of potassium for some time, combined with the liquid extract of ergot; afterwards, of bichloride in small doses, which affected her gums. She was then placed on tincture of belladonna up to doses of twelve minims. At the end of the sixth week, the progress of the disease seemed checked. Improvement first showed itself by commencing return of sensation in the lower extremities. The various pains lessened in severity and became less frequent. Then the patient became able to grasp more steadily. Contemporaneously with these signs of amendment, the lower extremities became stronger; and in the tenth week of her residence in the hospital she was able to creep along, but it was not until the end of the third month that she could cross the ward on foot. With improvement in other respects, a marked change occurred in her general demeanour; she became cheerful, and her voice in talking lost its feebleness. The following observations on the girth of her limbs will illustrate the course of the malady through the muscular atrophy by which it was attended. The patient was admitted on February 17th. (The measurement of the thigh was taken seven inches above the patella.)

March 10th. Right thigh, $14\frac{1}{2}$ inches; left thigh, 15 inches; right calf, 9 inches; left calf, $9\frac{1}{2}$ inches.

April 16th. Right thigh, $12\frac{3}{4}$ inches; left thigh, $13\frac{1}{2}$ inches; right calf, 8 inches; left calf, $8\frac{1}{2}$ inches.

May 31st. Right thigh, 16 inches; left thigh, $16\frac{1}{2}$ inches; right calf, $9\frac{1}{4}$ inches; left calf, $9\frac{1}{2}$ inches.

August 2nd. Right thigh, $17\frac{1}{2}$ inches; left thigh, 18 inches; right calf, $9\frac{3}{4}$ inches; left calf, $10\frac{1}{4}$ inches.

March 10th. Expansion of chest by forced inspiration, under three-quarters of an inch.

May 26th. Expansion of chest by forced inspiration, over an inch and a half.

During the course of her recovery, a fresh symptom appeared: paroxysms of profuse perspiration, soaking her clothes and pouring off her face. Some of these paroxysms lasted through a day or a night; otherwise for two or three hours. The nurse stated that she became scarlet all over when the perspiration occurred. The temperature of the axilla was from 98 to 97 deg. during the perspiration. On one occasion, the temperature of the hand was tested, and found to be 92 deg. As stated, she was admitted on February 17th. She left the hospital cured on September 1st.

CASE III.—The history of this case is, unfortunately, very defective, as my colleague in attendance had not seen the patient during the first part of her illness, and she had been removed from her own home. The patient had been addicted to habits of intemperance for an unknown period. She had certainly taken spirits; probably other liquids also. She had been compelled to keep her bed for a month on account of loss of power in the lower extremities. For how long power had been

failing, was not known. There was also an account of severe pain in the legs, and especially in the feet. At the time of my visit, her state of mental disorder prevented her from giving any clear account of her symptoms; but the nurse stated that she complained much of "chilblains" in her feet, and that she begged her to take off her boots, as they hurt her feet. There was also some indefinite account of pain in the lower part of the abdomen. When I saw her, there were much mental feebleness and some delusion; but, when her attention was roused in some special manner, she answered rationally for the moment, and obeyed directions with a fair degree of promptitude. When left to herself, she talked without reference to the reality of her position, and often tried to get out of bed. She had only sufficient power in her lower extremities to enable her to drag them about in bed. Muscular atrophy in the lower limbs was extreme. Sensation was so much impaired that a pin could be plunged deeply in the substance of the leg without eliciting any evidence of being felt. Her upper extremities were probably unaffected. She retained full control over the sphincters. Three days before my visit, her temperature was 104 deg.; it had declined to 100 deg. Her face had a healthy aspect; her appetite was good. There was no enlargement of the liver, and no albumen in the urine. The organs within the chest were healthy.

Two months after my visit, my friend writes me word that the patient remained with little change for five weeks. Her pulse averaged 110. Morning temperature was 100 deg.; evening, 102 deg. The temperature is now normal in the morning; 100 deg. in the evening. She was very talkative and excited, and manifested various delusions; she then became depressed, frequently crying. Her mind now is in a more healthy condition, though she never asks about her home. Sensation is restored in her legs; but atrophy of the muscles remains, and the flexor muscles appear to be acquiring preponderating power. She lies with her knees bent, and has pain in them. Her appetite has remained good; she has taken food well. Her bowels have been very costive. She has full power over her evacuations.

POSTSCRIPT.—I have had the opportunity of again seeing the patient the subject of Case I (page 121), three months after the last note of his case was taken. The condition of the limb has undergone no further change; but the young man now possesses some power of independent movement in the different segments of the lower extremity whilst walking. This statement confirms Meyer's observation that the disease in the adult disables less than in children.

PHYSICIANS' PRESCRIPTIONS AND THE SALE OF POISONS ACT.

By JULIUS ALTHAUS, M.D.,

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AT the last meeting of the Clinical Society of London, I drew attention to a case of chorea, in which the patient had done himself a great deal of harm, and apparently killed himself, by the immoderate use of the hydrate of chloral, for which I had given him a single prescription in 1870, and which he continued, contrary to my advice, to take incessantly until his death in 1874. This case suggests an important question, which must, at various times, have occupied the professional mind; viz., whether the custom obtaining in this country, that patients may, at their own discretion and for years, procure from dispensing chemists any amount of certain powerful medicines, such as strychnia, opium, arsenic, etc., for which only one prescription has been given, is a proper one. In the case to which I allude, the patient had been in the habit of ordering wholesale supplies of the chloral mixture at a time from a leading West-End establishment, and showed me, at one of my visits, to my horror, a box full of twelve bottles of this medicine, which he had just received.

This custom, which has recently grown to excessive dimensions, is evidently a reprehensible one, inasmuch as it renders it impossible for the physician to regulate the dose which he wishes to be taken, and likewise opens the door to crime. Opium-eating and chloral-drinking may thus be readily induced, and a medicine which was intended to benefit becomes a curse to the patient. Again, secret poisoning, which remains undetected and unpunished, would appear to be by no means uncommon in this country, where the provisions of the Sale of Poisons Act are rendered to a great extent nugatory by the unlimited use which may be made of a formula, not only by the patient to whom it was originally given, but also by his friends, for whom, as is well known, the chemist frequently copies a prescription. Thus the would-be poisoner may go with a receipt for a small quantity of laudanum to twenty different chemists, put the supplies received together, and give the dose