I should say that between June and November the patient had gone into the surgical wards in order to have an operation, but that Mr. Anderson had hesitated to undertake one.

Operation.—However, Mr. Anderson and I consulted on the case, and thought that section of one or more roots might relieve his sufferings if it could not cure the disease. The serious nature of the operation having, therefore, been fully explained both to the patient and his family, on November 26th Mr. Anderson did a laminectomy and exposed the cord at the level of the sixth, seventh, and eighth dorsal roots. Nothing abnormal was seen on the cord or its membranes, but the eighth left posterior root was distinctly thicker than the others. Pieces were cut out from the seventh and eighth roots on both sides, those from the eighth roots being placed in osmic acid for microscopical examination. The result of the operation was not satisfactory, as, in spite of antiseptic syringing, pus formed in the wound, fever set in, and six days later the patient died.

Necropsy.—The spinal cord showed no definite tracts of sclerosis, but there were diffuse patches of softening, especially near the site of operation. There was no tumour or meningeal thickening, except fresh granulations at the wound, and the remaining nerve roots looked healthy to the naked eye. On opening the skull, the dura mater was found to be tough and rather thick, and the pia arachnoid was thickened and opaque in patches. There were no other naked-eye changes.

Microscopical examination of the removed posterior roots showed excess of fibrous tissue and a great reduction in the number of nerve fibres in the left root, while in the right there was a very slight decrease of the normal fibres. (See photographs.)

Sections of the spinal cord stained by Weigert's method or by Delafield's hæmatoxylin were examined at various levels. All the anterior roots were found to be normal. In the lumbosacral region a posterior root on one side showed a few degenerate fibres, while that on the other was normal. The posterior columns here showed some quite recent softening, doubtless a sequel to the operation, but I think there was a very slight chronic sclerosis also in the postero-external columns.

In the lower dorsal region the roots on both sides were normal, and no distinct sclerosis was seen. About half an inch below the site of operation the root on one side showed degenerate fibres, the others being healthy. At the level of the eighth dorsal nerve the cord was somewhat disorganised from recent softening. The posterior root on one side showed but few healthy fibres, on the other was nearly normal. At the level of the fourth cervical nerve the roots were absolutely healthy, and there appeared to be a very small amount of sclerosis in the postero-internal columns, though here, as elsewhere, the recent softening of the posterior surface of the cord obscured the picture.

Sections of the cerebellum and left occipital lobe showed no morbid changes.

Reviewing the case as a whole, I think we must conclude that the pathological process was closely akin to that of tabes dorsalis; but that instead of a degeneration of a large number of posterior roots in the lower part of the cord leading to posterior sclerosis, in this case only a very few were picked out, one especially—the left eighth dorsal—undergoing degeneration of nerve fibres with formation of fibrous tissue, the growth of which caused the intense pains and—reflexly—the contractions of the rectus muscle.

The diagnosis was thus fairly accurate, and we must regret that treatment was not more successful. It is, however, the general experience that the deep wound produced by laminectomy in a muscular man is difficult to keep aseptic, and I think it probable that deficient innervation may in this case have diminished the healing powers of the tissues, just as in cases of true tabes dorsalis the cutting of a corn may lead to a perforating ulcer.

THE PRINCE OF WALES'S HOSPITAL FUND.—In view of the falling-off in the financial support of the hospitals of London in consequence, it is surmised, of the war in South Africa, efforts are being made to augment the income of the Prince of Wales's Hospital Fund. The executive committee is issuing an appeal for subscriptions to the fund to counteract the effect of this falling off. It is suggested that in order to help the hospitals to continue their work at least £25,000 additional should be contributed before December 15th next. The sum available for distribution to hospitals in 1899 was £41,000 as compared with £32,500 in 1898, and £56,826 in 1897. Of the total amount accruing to the fund in 1899 £1,000 was received from the League of Mercy.

AN EPIDEMIC OF PERIPHERAL NEURITIS AMONGST BEER DRINKERS IN MANCHESTER AND DISTRICT.

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WE are only too well acquainted with so-called alcoholic peripheral neuritis in Manchester, but lately there has been such an extraordinary increase in the number of these cases among beer drinkers that there is in such people a veritable epidemic, the symptoms varying, however, as will be seen, from those generally present in alcoholic neuritis.

I began to notice about three months ago that a most unusual number of patients presenting themselves at the out-patient department of the Manchester Royal Infirmary complained of numbness and sensations of "pins and needles" and burning in the hands and feet. Some of these I diagnosed as erythromelalgia, but others were apparently cases of alcoholic neuritis, with the typical tenderness of the muscles, together with motor weakness. At the same time I found in my medical wards at the Manchester Workhouse Infirmary a very large number of cases of "alcoholic neuritis." At last there could be no further doubt that a distinct epidemic existed, for besides several hundreds of cases which have been under my care I found that other observers, including medical men in Salford and surrounding districts (such as Heywood) had been struck with the frequency of these cases. Dr. Dreschfeld had noticed it, and had been struck with the peculiar pigmentation present; Dr. Williamson told me that nearly half of the patients in the out-patient department of the Ancoats Hospital, Manchester, showed signs of peripheral neuritis, and Dr. Brooke had remarked to me on the great frequency during the last three months of peculiar skin eruptions (described below) at the Manchester Skin Hospital. At my own out-patient department at the Manchester Royal Infirmary fully one-fourth of the cases have shown the symptoms, and though I have not been able at present to get the exact number who have been diagnosed as "alcoholic neuritis" during the last three months at the Manchester Workhouse Infirmary, yet the actual number present in hospital to-day (November 17th, 1900) in the acute wards only is 65 (35 women and 30 men) out of a total number of patients in these wards of 284 (104 women and 180 men). This is about 23 per cent. of the cases, 30 per cent. being women and 15 per cent. men. All these 65 are, of course, cases of so severe a character that they have had to be put to bed; they do not include any of the much more numerous milder types, who can be treated in an out-patient department.

Women are affected more frequently than men, and all the patients are beer or porter drinkers, some taking spirits also, but beer was invariably the favourite and usual beverage. Although it is difficult to get to know the exact amount of beer taken a day, yet I am convinced after careful inquiry that in some at least not more than four glasses a day have been consumed, though in others larger quantities had been taken. The beer taken by these patients has not come from any particular brewery, the names of five different brewers having been already given to me by patients as supplying their favourite drink; other patients drank any beer they could get irrespective of the brewery from whence it came.

SYMPTOMS AND PHYSICAL SIGNS.

In answer to the usual question, "What is the matter with you?" the out-patients have given such answers as "pains in the feet and hands," "tingling and feeling of pins and needles in the fingers and toes," "burning in the feet," "pains in the limbs, with loss of power in the legs and arms," "rashes on the body with much itching" (peculiar forms of erythema). I have also noticed during the last three months quite an unusual number of cases of herpes zoster, certainly more than we commonly see at this time of the year.

EXTERNAL APPEARANCES.

The aspect of many of these patients is so typical that they can be diagnosed at sight. The face is puffy especially about the eyes; the eyes are suffused and watery, and the skin of the face is often dark coloured from pigmentation. The patients often rub the fingers together, and some walk into the room as if the feet were very sore; some of them, in more marked stages, have a typical "dropped foot" due to the paralysis of the anterior tibial muscles.

On examining the skin almost all show some pigmentation, sometimes of such an extreme degree that the whole of the skin is darkened to the tint of a mulatto. But in other cases the pigment spots are isolated in patches on the trunk and limbs, the spots being about the size of a large pinhead or of a hempseed, normal skin being present between; in other cases the pigmentation looks uniform, but on closer examination it is seen to be punctiform, each minute spot being round a hair follicle. Old pigment spots on the skin become very much darker, and wherever there has been pressure, such as round the neck, round the waist, and under the garters, there is a much darker ring of pigment. Many of the cases are just like Addison's disease in appearance, the armpits, the nipples and near the genitals being deeply pigmented. There is no pigmentation on the palms of the hands or soles of the feet.

The erythematous eruptions are very varied in character and accompanied by itching; sometimes there is an almost continuous scarlatiniform rash, but more often a measly rash, these rashes afterwards becoming covered with a scaly desquamation. Many present marked keratosis of the hands and feet, which is either uniform or in warty patches; in a few cases blisters had formed exactly like pemphigus (but containing darker contents), these blisters being succeeded by a scaly round patch. Two patients suffering from neuritis had herpes zoster.

I have already mentioned that very many of the cases presented signs of erythromelalgia or the "red neuralgia" of Weir Mitchell. This pain, redness, and swelling affects not only the soles of the feet, but also in many cases the palms of the hands; the pain was burning or tingling, the skin of the palms and soles was scarlet, and the parts glistened with moisture from the excessive sweating present; the odour of this sweat from the feet was sometimes intensely unpleasant. The burning of the feet was much intensified by heat, so that these patients could not sleep unless the feet were exposed outside the bed clothes.

NERVOUS SYSTEM.

Although some of the worst cases suffered from the mental confusion with loss of memory of time and place so characteristic and common in ordinary cases of alcoholic paralysis, yet taking the cases as a whole the number suffering from mental confusion was less than in the same number of alcoholic paralyses.

The nature of the paralysis differed in only a few points from that usually seen in ordinary alcoholic cases. In some the symptoms were entirely sensory and vasomotor, and in all, these were more marked than in ordinary alcoholic paralysis. In others the hand grasp and power of the anterior tibial muscles were merely weakened; in more marked cases there was wrist drop and foot drop with "high stepping" gait. In the most marked cases the arms and legs were entirely paralysed and atrophied, and finally the trunk muscles and diaphragm became paralysed, and several of the patients, nearly all being women, have thus succumbed. Ataxic gait slightly marked has been more frequently seen than in alcoholic paralysis. The knee-jerks in the slightest cases are increased, but in the advanced cases are of course absent. I have not seen any paralysis of the cerebral nerves.

In most of the cases showing any motor weakness there has been great tenderness of the muscles on deep pressure, so marked that one can go round a ward and diagnose the nature of the case merely by grasping the leg muscles through the bed clothes and watching the sudden expression of pain on the patient's face, generally accompanied by a forcible ejaculation of, "Oh!"

CIRCULATION.

In some of the cases there is failure of the heart muscle with the usual oedema of the feet and legs; the pulse is low tension, and rarely there is a soft mitral systolic murmur.

RESPIRATION.

Besides the irritability and running of the eyes, many cases in the early stages have complained of running of the nose and of frontal headache; some of the patients have a "husky" voice, as pointed out by Dr. Sissons, one of my assistants at Crumpsall, and many have bronchitis.

DIGESTIVE SYSTEM.

The tongue is often coated with a silvery "fur," and some gastric catarrh may be present. Sometimes there is stomatitis. In many cases there is persistent vomiting.

TEMPERATURE.

The temperature is often raised on admission to the hospital, and, if the paralysis is severe, it remains up for ten or more days. In the fatal cases it remained high—from 102° to 103° F. continuously—until death.

COMMENTARY.

Before drawing any inferences it is as well to put down shortly certain undoubted facts:

1. There is present in Manchester and district a wide-spread epidemic of peripheral neuritis, either sensory, vasomotor, or motor, or all three combined, associated with running of the eyes and nose (in many cases) and marked lesions of the skin.
2. Such an epidemic has never occurred in this district for the last twenty-two years to my personal knowledge.
3. The disease is only met with in beer or porter drinkers.
4. It is somewhat like the ordinary "alcoholic" paralysis at first sight, but differs from it in the greater amount of sensory and vasomotor disturbance, and especially in the presence of the peculiar skin lesions which are not present in alcoholic paralysis.

So far as I know, there are only three causes of peripheral neuritis of the type mentioned above and associated with the marked tenderness on pressure of the muscles; these are beri-beri, alcohol, and arsenic. But I think all will agree that beri-beri and alcohol will not explain the lesions of the skin. Against alcohol, also, is the fact that the features of this epidemic are something new, and that drinking of ordinary beer is not by any means a new thing in this district. We are thus reduced to arsenic as a cause of the symptoms, at any rate of the skin lesions, which in their multiform character can be explained by no known drug except arsenic.

Now, it would not only be alarming but highly illogical to state that there must be arsenic in the beer which has been consumed in this district for the last three months unless one had actually found the arsenic in the beer. At present I am conducting an analysis, but as the results are not yet complete, I have merely sent privately to the Editor of the JOURNAL an account of what I have found. But at any rate we can logically conclude that the present epidemic is either due to arsenic in the beer or else that all the classical signs attributed to arsenic may be caused by some other substance. Until more investigations have been made—and I trust that competent chemists will take up the matter at once—one cannot go further in what is obviously a highly important matter.

Addendum.—On Sunday November 18th I found a considerable amount of arsenic in certain beer used in this district, and confirmed the observation next day. I have Professor Dixon Mann's authority for stating that this morning (November 20th) he has also found arsenic in a different sample of beer. I have reason to believe that the source of the arsenic will be found to be the sulphur used in the hop industry.

THE habit of snuffing cocaine is said to be prevalent among the negroes in the Southern States of the American Union, and to be common also among the natives of the Bhagalpur District in India.

BRITISH MEDICAL TEMPERANCE ASSOCIATION.—The annual breakfast meeting of this Association was held at the Cannon Street Hotel on November 9th. There was a large attendance, including students from the principal London hospitals. Professor Woodhead presided, and the meeting was addressed by Mr. Pearce Gould, Mrs. Scharlieb, Dr. J. Dixon, Mr. W. McAdam Eccles, and Dr. Ridge. Nineteen students were afterwards enrolled as members of the Association.