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A GROUP OF FIVE CASES ILLUSTRATING A PECULIAR PARALYTIC
AFFECTION OF THE EXTREMITIES; OCCURRING AT THE
CITY HOSPITAL IN THE WINTER OF 1866-67.

Service of J. BAXTER UPHAM, M.D.

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CASE I.—J. S., laborer, aged 40, native of Ireland, twelve years in this country, was admitted into hospital Dec. 6th, 1866. Patient, a strong and vigorous man, with no traceable hereditary tendencies to disease; has had no illness since childhood, with the exception of a diarrhoea of ten days in August last; says he never used tobacco; owns to the occasional use of liquor, but not to its abuse; denies ever having been addicted to sexual excesses; no venereal taint discernible.

Present trouble commenced about six weeks previous to entrance, after exposure to wet, cold and great fatigue, beginning with headache and *malaise*, followed by pain and swelling in feet, with numbness and a sensation of "pins and needles from knees to toes." A paralysis both of motion and sensation, coming on slowly and slight in degree, succeeded, while at the same time similar symptoms were observed in the hands, the patient being unable to grasp with firmness or to pick up small objects with his fingers. The muscles of the affected parts were firm and well developed; intellectual faculties undisturbed; sight and hearing normal; bowels tolerably regular; no difficulty in micturition.

Symptoms on admission:—Countenance natural; decubitus mostly dorsal; surface of skin normal; respiration 16, easy and regular; pulse 56; appetite good; digestion unimpaired; tongue moist, without coat. The patient makes no complaint of pain. His wife entered the hospital at the same time, with precisely similar symptoms appearing on the same day, in the same manner, apparently without cause. A careful inquiry into the hygienic condition of the residence from which these patients came, and the nature of their food and drink, could elicit no satisfactory cause for the attack.

This patient was unable, at the time of entrance, to walk without
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assistance; the feet were dragged behind him, the toes scraping along the floor at every step. He was put upon regulated diet, with tonics; friction was applied to the hands and feet diligently, morning and evening. The thermo-electric battery was likewise ordered five or ten minutes at a time daily, in quantity sufficient to gently stimulate the muscles of the affected parts.

About a week after entrance, patient began to complain of violent pain in the lower extremities, confined to the feet for the most part, coming on pretty regularly at about 11, P.M., and lasting till three or four in the morning. This continuing for several nights in succession, he was ordered seven grains of quinine in divided doses, so administered as to produce the effect at about the time of the anticipated paroxysm of pain.

Dec. 13th, 1866.—No effect apparently produced upon the pain by the quinine of yesterday. To continue as before.

14th.—Pain in legs last night as before, but not as severe. To continue the treatment.

15th.—No access of pain at the expected time last night. Quinine to be omitted.

16th.—Patient had a return of pain at 11, P.M., preventing sleep; pain confined to legs. In other respects, his general condition much as heretofore. To resume quinine as at first ordered.

18th.—Complains of "heat and heaviness" from knees downwards, with inability to move the ankle-joints; feet and legs warm and moist; grasp of the hands much firmer; tongue a little furred; some tendency to constipation. Ordered pil. rhei comp. in amount sufficient to move the bowels. Quinine and thermo-battery to be continued.

24th.—Patient was able to leave his bed and walk a little about the ward; did not drag the toes as heretofore; no lack of coördination in the muscular movements observable. Sensation more natural in the hands; grasp firmer. Patient thinks the nocturnal pain much diminished under the use of quinine and the battery.

Jan. 5th, 1867.—Patient sitting up. General appearance much improved; grip of hands manifestly improving in power; still some numbness in tips of fingers; walks heavily, but does not drag the feet; appetite good; some pain in legs and feet last night, so much so as at times to interfere with sleep.

Feb. 1st.—Quinine was omitted and iodide of potassium, five grains three times a day, substituted. Functions well performed. Patient improving.

13th.—Less pain than at any time previous; patient can walk about without difficulty, but complains of "stiffness" of ankles in going up stairs. The iodide of potassium had been omitted and quinine resumed, with dry frictions and electricity every other day.

23d.—The patient was so much improved that he thought he was able to go about his usual business, and he was discharged.

CASE II.—S. F., horse-car driver, 63 years of age, a native of Maine, entered hospital Jan. 1st, 1867, with paralysis of upper and lower extremities. He appeared a strong, healthy, vigorous man, of firm constitution, with no marked hereditary tendencies. Had pleurisy ten years previously; with that exception has not been ill since boyhood. Uses liquor daily to a moderate amount; in other respects reports his habits to be good.

Nine days before admission, the patient first noticed a sensation of numbness of lower extremities extending from feet to knees, accompanied for two days with a general feeling of debility and malaise. From the nature of his occupation he had been much exposed to wet and cold and changes of weather, and he attributed his illness to influences of this nature. Soon after his attack, he noticed a prickling sensation, not only in his feet and legs, but hands also; a slight paralysis of motion in legs followed. He had some nausea and vomiting, and was obliged to take to his bed.

The patient is now (Jan. 1st) lying helpless on his back, in much depression of mind, with flushed face and restless eyes; pulse 96; respiration 22; no appetite; urgent thirst; tongue thickly loaded with a brownish coat; an offensive breath; bowels constipated—has had no dejection for two days; his urine is passed frequently, and in small quantities; sleeps poorly at night. There is paralysis both of motion and sensation in the hands and feet; muscles of the affected parts firm and natural; reflex action not produced on tickling the soles. Intellect clear.

This patient was ordered a cathartic consisting of *ol. ricini* ʒ ss., *ol. terebinth.* ʒ ss., *acaciæ mucil.* ʒ i.; friction of the extremities with an opiated liniment, and a small dose of sulphate of morphia at night.

Jan. 3d.—Dr. Upham's notes are as follows: grasp of hands equal, but feeble in power; tongue somewhat dry, covered uniformly with a yellowish coat; some thickness of speech; slight injection of the conjunctivæ; sensorium clear; no appetite; much thirst; pulse 96, regular, of moderate strength and volume. To be allowed one ounce of whiskey three times a day, and to drink freely of milk and lime water. He was ordered the thermo-battery in like manner with the patient first named.

4th.—There appears to have been some increase in the grasp of the hands since admission. He can move legs and feet more freely; tongue less dry and a little less furred; appetite somewhat improved. To have chicken broth at dinner.

7th.—His general condition improving, he was put upon the citrate of iron and quinine in doses of two grains three times a day. There being a constant tendency to constipation, he was allowed a daily diet of mush and milk, which seemed very acceptable to him, and the bowels were kept open daily by a mild cathartic. The patient continued from this time daily to improve; his tongue cleaned;

his spirits recovered their elasticity; all the functions were more normally performed; the affected extremities grew daily stronger, and sensation and motion returned. By the 1st of February the patient was able to be up and walking about the wards, and on the 23d of that month was discharged entirely well.

CASE III.—W. W., 50 years of age, native of Ireland, was brought into the hospital Dec. 20th, 1866, with paralysis affecting the upper and lower extremities to a degree completely incapacitating him from any exertion. His family history is obscure; he says he had a fever six years ago; takes alcoholic stimulants of all kinds, when he can get them; says, however, that for the past year he has only taken liquor occasionally.

Eight weeks before admission to hospital, he was seized with chills and rigors, followed by nausea and vomiting, with severe headache and pain in bowels; three or four days subsequently he was seen by a physician, who pronounced his case to be one of typhus fever.

The patient's son, a lad of nine years, was seized at the same time with similar symptoms, but entirely recovered in two weeks. Six weeks ago, on recovering from the urgent symptoms of the above-named seizure, the patient first noticed a tingling sensation, as of "pins and needles," in the hands and lower extremities, followed by some numbness and slight paralysis of motion, which increased until he was unable to support himself on his legs, or pick up small objects with his fingers, and this condition remained up to the time of entrance into the ward. He complains also of great weakness and general debility; there is no fever; tongue is clean, rather pale and flabby; appetite poor. Marked wasting of the muscles of the lower extremities. The patient was ordered to be rubbed night and morning with dry flannel and mustard; was put upon good diet, with occasional stimulants, and was ordered to take a pill consisting of two grains of citrate of iron and quinine, three times a day, and to have the thermo-electric battery applied to the extremities for a period of ten or fifteen minutes every other day. The progress of this case was very tedious.

Jan. 18th, 1867.—Dr. Upham's notes continue as follows: Patient complains for the first time of pain in legs from knees downward, more severe at night. He was ordered quinine in sufficient amount to induce cinchonism at about the anticipated period of the attack.

24th.—A little more power in upper extremities; appetite good; tongue clean; bowels regular; general appearance somewhat improved. To continue the iron and quinine, in previous doses, twice daily, with the addition of cod-liver oil in whiskey; dry friction to extremities every day, and battery every other day as heretofore.

March 4th.—Patient able to get out of bed, and to stand with the assistance of chairs. Treatment continued.

31st.—Patient very gradually improving; general condition bet-

ter; functions well performed; appetite good; sleeps well; can now walk about his bed very feebly with the aid of chairs. At this time he passed into the hands of Dr. Blake, Dr. Upham's successor in the hospital service, and was discharged, July 1st, 1867, much relieved, the patient being able, for three weeks previous to his discharge, to assist in the general duties of the ward.

CASE IV.—H. H., aged 46, born in Ireland, a washerwoman, admitted to hospital Dec. 7th, 1866. No satisfactory family history could be obtained; she had been thirty-seven years in this country, during which time her health had been good. Has had rheumatism, and, six years ago, an attack of pleurisy. The catamenia were suppressed a year since; has had four children; has been for the past eighteen years a widow. Hygienic conditions under which she has resided, poor.

Six weeks ago, while pursuing her usual occupations, she was much exposed to wet and cold, and was soon after attacked with numbness and a prickly sensation in feet, accompanied with coldness in her lower extremities from the knees downwards. On attempting to walk, she noticed that her feet dragged, and experienced in them a sensation of weight and heaviness; since that time the paralysis has gradually increased. At first confined to lower extremities, it extended soon afterwards to the hands. Sensation in the parts appears to be only slightly affected.

The patient is now (Dec. 7th) sitting up, somewhat depressed in spirits; countenance natural; intelligence good; appetite fair; tongue moist, and without coat; pulse 92; urine normal, and passed without difficulty; bowels regular; no tenderness on pressure over any part of vertebral column; patient sleeps poorly at night. The muscles of the affected parts appear to be in their normal condition. She was directed to have a pill consisting of extract of hyoscyamus and camphor, two grains each, at night; dry friction with Cayenne pepper and flannel to hands and feet twice a day, and the thermo-electric battery as in the previous cases.

This patient, while under treatment, had occasional attacks of articular rheumatism, and the paralytic affection being presumably of rheumatic origin, she was treated in accordance with that supposition, but with very unsatisfactory results. Some relief was thought to have been obtained by the persistent exhibition of iodide of potassium, friction to the extremities, electricity being continued meanwhile. The extremital paralysis, at the expiration of three months, began to yield.

March 20th, 1867.—She could walk about the ward without assistance and was improved in her general health, and, on the 29th, was discharged, considerably relieved, but without having regained the normal use of her hands and feet.

CASE V.—H. M., a native of Ireland, 40 years of age, twenty-five
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years in this country, was brought into hospital Dec. 4th, 1866. Her family history is obscure, but as far as could be ascertained, no hereditary tendencies to disease exist; general health, up to the time of her present illness, excellent; the hygienic influences under which she had lived were of a depressing character.

Her present attack commenced four weeks previous to admission into hospital, after exposure to cold and wet, beginning with coldness, numbness and a prickling sensation in the feet, with occasional heat and pain, which conditions continued, with aggravations, up to the time of her admission as above. There is now paralysis both of sensation and motion, limited to the feet and legs from the knees downwards, and both affected to the same extent. There is also some stiffness and loss of power, but not of sensation, in the hands. The patient is a large, well-formed woman. The symptoms on admission were as follows: Patient now in bed, unable to rise or help herself in any manner; decubitus dorsal; surface natural in temperature, but emitting a peculiar nauseating, typhus-like odor; tongue covered with a light white coat; breath offensive; pulse 120, and very weak and feeble; respiration 22; appetite poor; no difficulty in micturition; bowels habitually constipated; no pain in head or back; no tenderness on pressure over vertebræ; intelligence complete; no reflex motions excited on tickling the soles of the feet; sleeps poorly at night. She was ordered an enema sufficient to move the bowels, and a small dose of morphia at night.

Dec. 5th.—Dr. Upham's notes run thus: Pulse 136, weak, compressible; surface of skin cool and natural; one dejection from the enema; slept well during the night, the first time for several days. She was ordered a good diet, tonics and port wine. Bowels to be kept open by mild cathartics or enemata.

7th.—Patient began to complain greatly of pain in her lower extremities; pulse 128, still weak and compressible.

9th.—Pulse 124, stronger, and of more volume than heretofore; less emanation from body; less factor of breath. The thermo-battery was now applied for the first time to both upper and lower extremities, with friction to surface morning and evening.

15th.—Tongue somewhat more furred, especially at base, natural at tip, moist; the patient complains of pain of a paroxysmal nature, with a tendency to periodicity, coming on for the last few nights at about 11, P.M., and preventing sleep; but little appetite; no thirst; pulse 128. One fourth of a grain of sulphate of morphia was directed to be given, by subcutaneous injection, if the distressing pain recurred.

16th.—Tongue somewhat coated this morning; skin more moist; pulse 136. The paroxysm of pain again returned at 10, P.M., lasting till the morning, the subcutaneous injection producing only an evanescent effect. Directed quinine to be given in doses sufficient

to induce cinchonism at about the hour of the expected return of pain at night.

17th.—Tongue shows some disposition to clean in patches. Quinine to the extent of seven grains having been taken in the manner directed, the patient felt no return of pain during the night, and this morning is in good spirits and looks better. Complaints of want of sensation in hands (in right more particularly than in left); pulse 124. To continue the quinine as above directed.

18th.—No pain in feet and legs last night; excessive tenderness and soreness in the parts complained of; tongue moist and furred in stripes; breath offensive; pulse 124; no dejection for three days. An enema, consisting of ol. ricini ʒ ss., ol. terebinth. ʒ ij., spts. vini gallici ʒ ij. and aquæ tepidæ ʒ viij., to be given immediately.

19th.—Slept from 9, P.M., till 1, A.M. Some pain in legs on waking; one dejection from the enema; tongue a little less furred and of better color. The patient has now, for the first time since entrance, some appetite; much thirst; skin cool and natural; some diaphoresis during the night; expression of countenance better. To continue the treatment. The patient from this time began sensibly but very gradually to improve. On the 20th and 21st, the pulse was 120. The diet was now increased. On the 29th, pulse 116; tongue nearly natural; grasp of the hands sensibly stronger, and the patient mentally much improved.

Jan. 3d, 1867.—Pulse 112.

5th.—Pulse 108; tongue natural; more motion in legs. The patient can now turn to either side without assistance, and raise herself in bed. Sleeps well.

7th.—General appearance better than at any time previous; slept very well; grip of hand increased; tongue clean; pulse 104; some tendency still to constipation. *R.* Pulv. jalapæ co., gr. iv.; confect. sennæ, ʒ i. *M.* Cap. omni nocte.

14th.—One dejection daily; hands and feet improved, both in sensation and motion.

Feb. 3d.—Pulse 104. Patient improving daily.

10th.—Patient can walk about the ward with an assistant on each side. Pulse 100.

23d.—Patient able to walk about with a cane.

From this time, with occasional drawbacks, the patient continued slowly to improve, and on March 12th was discharged, being at that time able to walk without assistance; all the functions naturally performed; her appetite good, and feeling herself competent to gain a livelihood outside the hospital.

In this case the muscles of the extremities, during the time she was confined to her bed, manifestly wasted and lost their firmness, although not to the extent mentioned in Case III.

The above group of cases is interesting as showing a somewhat novel manifestation of paralysis, appearing without satisfactory cause,

in (for the most part) persons of robust constitution and previous good health. The occurrence of severe paroxysmal pain in the lower extremities in three or four of them is somewhat remarkable.

The use of the thermo-electric battery seemed to be of benefit as affording a gentle stimulant to the muscles of the affected parts, taking the place, perhaps, of active exercise, which, in the nature of things, could not be resorted to.

On the whole, an invigorating diet and tonic treatment, with careful attention to the condition of the bowels (which tended to constipation throughout), seemed to be of great service in the treatment of the disease.

In the cases where the wasting of the muscles, above alluded to, was apparent, the improvement was much more tedious and unsatisfactory.

VELPEAU.

Translated from the Gazette des Hôpitaux, for the Boston Medical and Surgical Journal.

ARMAND LOUIS MARIE ALFRED VELPEAU was born on the 18th of May, 1795, at Brèches, near Tours. His father was a farrier, and had some skill in the veterinary art, and the future Professor of the Faculty of Paris was first brought up to shoe horses. Never, be it said to his praise, did he ignore his humble origin, and he was accustomed to say that he had borrowed from veterinary practice more than one surgical instrument of value.

At the age of 17, he had the good fortune to make the acquaintance of Brétonneau, which decided his future career. His industry and abilities soon caused him to be distinguished among the pupils of the hospital of Tours, and shortly afterwards, when he decided to come to Paris to continue his studies, Brétonneau cordially aided him with advice, letters and money. Years afterwards, in his scanty moments of leisure and social relaxations, Velpéau used to recall with pleasure these episodes of his youth, and acknowledge the kindness and sagacity of that great practitioner, to which we owe two of our most eminent professors, Trousseau and Velpéau, whose fortune it was to begin together their scientific career, and to die within a few days of each other. On his arrival at Paris, with very slender resources, M. Velpéau had not only to struggle against poverty, but what was still worse, with the inconveniences of a preliminary education which was wholly insufficient, not to say entirely wanting. He was scarcely familiar with the first elements of the French language, and as to Latin he only knew the little that a poor village curate could teach him in those days of ignorance.

With these weapons he went to encounter his rivals, all of whom had the advantage of a substantial education and of a more or less comfortable pecuniary condition. But indefatigable industry, the