A CASE
OF
FRACTURE OF BOTH BONES OF THE
LEG,
OCCASIONED BY A VERY SLIGHT CAUSE, IN A WOMAN
THE SUBJECT OF TABES DORSALIS.

BY
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E. Q—, æt. 34, a stout, well-grown, good-looking brunette, was received into the Middlesex Hospital on 18th April, 1882.

She related that ten days previously she had broken her leg whilst in the act of hopping on this leg across her room ; at the moment of the accident she experienced a sudden sharp pain in the leg, felt a snap, and then fell to the ground. Her health, she said, had never been so good as might be supposed from her "good looks." She had been thirteen years married, and had had one child only, two years after marriage.

About the year 1874 her right foot began to trouble her, it seemed swollen, and a corn, as she supposed it, came in the sole. Later this corn became a " perforating ulcer " in the inner side of the foot. For these troubles

she went into St. George's Hospital, where she underwent several operations, respecting which its Surgical Registrar courteously supplied the following particulars :—" 1876, marked anæsthesia of all nerves of the (right) foot; ulceration in sole; great pain. First metatarsal removed, very much thickened. (Later) Syme's amputation for pain and anæsthesia. 1878, nerve-stretching. (Subsequently) excision of $1\frac{1}{4}$ inches of the sciatic nerve. Functions never altered. 1879, 10th July, re-amputation 2 inches above the stump. 10th October, (leg) removed through the knee."

In the latter part of 1879 she began to experience shooting pains in the left leg.

The condition of her lower limbs at the time she was admitted into the Middlesex Hospital (1882) is recorded in the following note :—"The seat of the fracture (in the left leg), sustained ten days since, is marked by a slight angular bend and a lateral displacement at the junction of the middle with the upper third of the tibia. The direction of the fracture is nearly transverse. The surrounding parts are very swollen, and the integument is discoloured by an exceptionally large ecchymosis which extends upwards nearly to the trunk.

The integument of the right thigh, groin, and buttock are completely anæsthetic, with the exception of the following small areas, where tactile and thermal sensibility are much lowered but not quite lost: viz. (1) a small patch at the upper and inner part of the thigh and of the outer surface of the labium majus, continuous with it, innervated by the inferior pudendal branch of the small sciatic; (2) an inguino-pubic area continuous with the upper part of the labium majus, receiving branches of the ilio-hypogastric and ilio-inguinal nerves; and (3) a narrow area in the front and upper part of the thigh, supplied by the crural branch of the genito-crural.

(The innervation of the left lower limb was not at this time investigated.)

The fractured limb was placed in a MacIntyre's splint

and swung. She suffered more frequent and severe pain in the injured limb than is usual at such an interval after the date of fracture. The 23rd of April was marked by an attack of vomiting, unprovoked by any error of diet, which lasted through two days, and ceased after the exhibition of bismuth and hydrocyanic acid.

On May 19th the plantar and dorsal surfaces of the toes were discovered to be anæsthetic, the sensibility of the leg and thigh not being appreciably altered. The insensibility of the surface of the right thigh to tactile and thermal stimuli was unchanged.

June 7th.—Another attack of vomiting, also headache. In the right thigh the area supplied by the crural branch of the genito-crural nerve is now quite anæsthetic.

13th.—Splint removed; the fracture appears firmly united.

On June 25th she returned home. Next day she re-entered the hospital, the apparently solidly united fracture having given way at 10 o'clock that morning, whilst she stood for a moment partially supporting herself as she was being lifted out of a Bath chair. The splint was re-applied. On July 23rd it was replaced by a gypsum bandage, wearing which she left the hospital on August 3rd.

On July 11th the sensibility of the surface of the left leg and thigh was found distinctly lowered, except in the area supplied by the inner branches of the anterior crural nerve. At the date of her final discharge from the hospital anæsthesia of this area had become complete. The circumstances of the fracture prevented electric examination of the muscles of this limb. The further history is, unfortunately, unknown.

It should be added that a careful inquiry into the patient's personal history for evidences of syphilis completely failed.

The circumstances of this case distinctly place it in the class which form the subject of Mr. Rivington's paper announced to be read on the 28th inst.

The pains in the lower limbs, with numbness and associated "perforating ulcer," and also "crises gastriques," clearly indicated the *dorsal tabetic* nature of the nerve disorder. The relatively early age of the patient, eight years less than that of Mr. Rivington's five patients (see *ante*, page 174), the comparatively advanced phase of the nerve disorder when the fracture occurred, and the imperfectness of the union of the fracture leading to re-fracture by a yet slighter cause than that which produced the original fracture, sixty-four days after the occurrence of this, are points in this case which appear noteworthy.

(For report of the discussion on this paper, see 'Proceedings of the Royal Medical and Chirurgical Society,' Third Series, vol. v, p. 67.)