25th.—Ulceration healing rapidly. Sat up one hour.

28th.—Patient up most of the day. Walks about room.

30th.—Discharged, cured.

SEVERE NEURALGIA OF THE TONGUE. EXCISION OF THE LINGUAL NERVE.

By M. Vanzetti.

Translated from the Gazette des Hopitaux, Jan. 21, 1868, by S. G. Webber, M.D.

Among the neuralgias of the branches of the trigeminal, that affecting exclusively the lingual nerve is one of the least frequent, and physicians of much experience have seen no example of it; also, science possesses up to the present moment only very few cases of excision of the lingual nerve on account of this neuralgia. It is known that this operation was performed for the first time by M. Borer, and then by M. Linhart.

M. Michel (of Strasbourg) published in 1857 (*Gazette Médicale* de Strasbourg, Nov., 1857) a very good case of excision of the lingual nerve through the floor of the mouth, an operation since performed, according to the same method, by M. Boeckel. In 1850, Mr. Hilton had the happy idea of excising the lingual nerve through the floor of the mouth to relieve the sufferings of a patient with cancer of the tongue (Guy's Hospital Reports, vol. vii., 1st series, 1850). Mr. Moore, of the Middlesex Hospital, repeated the operation a few years since, excising the nerve while it is still attached to the upright branch of the inferior maxillary, in the midst of the internal pterygoid, combining this operation with ligature of the lingual artery of the same side (Holmes's Surgery, vol. iii., p. 915). Having ourselves had occasion to excise this nerve on account of neuralgia, we believed it would be interesting to publish the following case.

Piva M., of the village of Legnago, aged 64, mother of twelve children, came to our consultation on the 18th of November, 1862, seeking advice on account of the pain which she experienced intermittingly in the mouth and lower jaw, especially when she eat. The data furnished by this patient were very confused. We found, after careful examination, no appreciable alteration in the region said to be painful. The diagnosis of a neuralgia was made, but without being able to determine its exact location; it might be in the lingual nerve, it might be in the inferior dental. The patient referred to no well-defined sensitive point, nor did examination discover any. She dated back the origin of her suffering about a year, just after an inflammation of the right cheek, which had been followed by an abscess in the mouth, which was incised. A very persistent fistula remaining at the seat of the abscess on the left tonsil, and pains beginning to appear, this point was cauterized three times with a red-hot iron.

We induced this woman to remain in the ward, and, at her entrance, injected sulphate of atropia under the buccal mucous membrane. The symptoms due to atropia were soon manifested to a sufficiently marked degree, and the patient felt, during the first days, considerable relief. A week after, the pains having returned with their original intensity, we proposed making a second injection; but the patient obstinately refused, telling us that she had not come to remain in the clinique. Returned home; her pains continued more or less during the year 1863, and became more violent still at the commencement of 1864. The injections of atropia, employed anew, cauterization of the ear, and many other remedies, were inefficient.

On the 24th April, 1864, the patient, bearing a letter from Dr. Maggioni, her physician, returns to the clinique to stay. This time she described to us her suffering very differently. Indeed she was, so to speak, pre-occupied with a single purpose; that was to persuade us that all her pain arose from a bridle situated beneath her tongue, which, by restraining its movements, caused her all her pain. She also often put her tongue out of her mouth, turning up the lip, to show us this bridle, touching it with her finger. There existed, in truth, on the left side of the frenum, a very prominent fold of mucous membrane, quite like a second frenum, but not at all restraining the movements of the tongue.

To satisfy the patient I made a cut with scissors through this bridle which occupied her attention so much. After that little operation, to our great surprise, all pain ceased, which caused us to believe that, in fact, that fold was the seat of the neuralgia. The patient, well satisfied, left the clinique on May 20, 1864.

She remained well and felt not the least pain until January 28, 1866. On that day it seemed to her as if the left half of her tongue was thickened, she felt there a strange pricking, and the following day she had difficulty in eating and speaking. Two days after to these particular sensations was united a gnawing pain, extending from the tip of the tongue along its left side to the

corresponding pillar. This pain appeared and immediately became intolerable when the patient eat, drank, spoke, in a word, at each movement of the tongue.

Such a painful condition, persisting in spite of the employment of morphine, hypodermic injections, &c., caused the patient to apply for the third time to the clinique on March 9, 1866. Her sufferings were cruel; she passed the nights without an instant of rest, she shed tears each time that, pressed by hunger, she sought to take any little nourishment; and still, to be able to swallow, she gave her head particular positions, pushed with much precaution, even into the œsophagus, the alimentary bolus, which she had formed into a ball, causing it to pass over the right side of the tongue; then she raised and bent her head backwards very suddenly to cause it to descend. In order to drink she applied the end of her tongue to the glass and pressed it there with the lower lip. During the day the pains were less severe than at night.

From 9th of March to 3d of April, opium, iodide of potassium, arsenic, ice, acupuncture, local anæsthesia with the apparatus of M. Richardson, electricity, &c., were tried but without success. We then remembered that, in 1864, the simple incision of some millimetres, made under the tip of the tongue, where the pain seemed to be localized, had caused it to disappear during about two years.

We made then, on April 3d, an incision, which this time was extended along the whole of the left side of the tongue to the pillar. The patient experienced a very great relief from it. She could speak and eat without suffering, and passed her nights in refreshing sleep, so that her constitution, very much reduced by the pain, the want of nourishment and of rest, began sensibly to improve.

Unfortunately this happy improvement lasted only fifteen days. The patient herself, perceiving the injurious effect of cicatrization, desired us to prevent it. The pain returned when the incision had cicatrized, and on April 24, was as severe as before, extending even from the tongue to the gums, and to the temporo-maxillary articulation.

April 27th, the patient is subject to excessively severe pain, which extends to the check, to the ear and along the entire left side of the neck. She complains of diminution of sight and diplopia. To alleviate these sufferings she is etherized several times a day.

May 2d, the patient is very much debilitated, she groans and weeps continually, and in attacks of despair desires to obtain relief in any manner whatever.

I decided to perform resection of the lingual nerve.

Taking advantage of a calm moment, the patient was conducted to the operating room; seated in a chair, her head was confided to an assistant who pressed it against his chest. The mouth was opened as much as possible, the right angle of the lips was drawn back by Luer's retractor; the tongue seized by the tip was drawn out and held by an assistant to the right and upwards. I then made an incision three or four centimetres in length with a small slightly convex knife, commencing beyond the last molar and extending from behind forwards, a little inwards towards the left side of the tongue in the groove between the tongue and gums. This incision commenced behind the anterior pillar of the velum palati, which being very prominent was divided, in order to reach as well as possible the point where the lingual nerve, turning round the anterior border of the pterygoideus internus, has a direction forwards and is horizontal.

At each stroke of the knife the blood was stanched with small pieces of sponge fixed on rods; the wound was enlarged by successive incisions, one lip being held aside by fine forceps, until a white cord was met which I recognized as the lingual nerve. I carefully dissected it out to the extent of two centimetres; then raising it a little with a blunt hook, I cut first towards its root, then towards the distal end.

When the nerve was cut, the pains ceased, not again to appear. The day after the operation, the patient spoke and took nourishment without suffering. On the third day, there was a slight traumatic swelling under the angle of the jaw on the side of the incision, which was cicatrized at the end of a week.

May 13th, twelve days after the operation, the patient, very well satisfied and very grateful, returned home in a state of perfect health.

The portion of the nerve resected was two centimetres long, and was adjacent to a small portion of Wharton's duct. Towards one of its extremities, my honorable colleague, M. Vlacovich, Professor of Anatomy, has recognized, under the microscope, the presence of the nervous corpuscles of the sub-lingual ganglion, whose existence has not yet been acknowledged by all anatomists. The structure of the nerve is normal.

Having lately inquired of M. le Dr. Mag-

gioni, Physician of the Opera, information on her condition, I have received in reply the following letter:—

"LEGNAGO, August 24, 1867.

"The person on whom you operated sixteen months ago has always enjoyed perfectly good health since, forgetting her excessive suffering, and blessing the hand which has given back to her her health. She complains of a more abundant salivary secretion than formerly. I have found it very alkaline.

"According to your request, I have pricked the left side of her tongue with a pin; she felt scarcely any painful sensation, while she experienced a very lively pain when the right side was pricked. I have applied on the side operated upon, extract of quassia first, then sugar, without her having the perception of the respective taste of these bodies; the right side, on the contrary, distinguishes very well and quickly the difference in their taste.

"I have the honor to be, &c.,

"DR. EVANGELISTE MAGGIONI."

Hospital Reports.

MASSACHUSETTS GENERAL HOSPITAL.

Surgical Operations for the week ending March 14th. Reported by Messrs. RUFUS P. LINCOLN and JOSIAH L. HALE, Jr.

(Continued from page 167.)

11. *Shoulder Dislocation; Reduction.* Dr. R. M. HODGES. Male, aged 60. One week's duration. Fell, and struck upon his right shoulder. He immediately commenced to have pain in the region injured, and had only partial use of his arm until his entrance; when, upon examination, there was found the usual deformity produced by the sub-coracoid luxation—loss of roundness of shoulder, tumor in axilla, and inability to bring the elbow to the side. The patient was seated upon the floor, the arm grasped by an assistant and slowly elevated, the shoulder being at the same time depressed by the foot of the assistant. This movement failed. The arm was again elevated, and then in the same manner lowered, by Dr. Hodges, he at the same time tilting the head of the bone into its socket by using his left hand as a fulcrum.

12. *Compound Comminuted Fracture of both Legs; Double Amputation.* Dr. R. M. HODGES.—Male, aged 60. Accidentally fell, so that the wheel of a heavy team passed over both feet and ankles, crushing and mangling them shockingly. There had been considerable hæmorrhage, which was checked temporarily by the application of tourniquets. The right leg was amputated at the junction of the middle and lower thirds; and the left one in the middle third, by the circular method. The arteries were ossified.

Operations for the week ending March 21st.

1. *Hip-joint Dislocation; Reduction.* Dr. R. M. HODGES.—Male, aged 45. Fell from a car while it was in motion. His left foot caught, and he was dragged for a short distance, when, his cries attracting attention, the train was stopped. Upon examination, a slight contusion was found just below the great trochanter of the right femur, and another one over the external malleolus of the same limb. The left foot was inverted, and rested upon the dorsum of the right. The knee was turned inward, and the limb partially flexed. Reduction was accomplished, by manipulation, at the first effort.

2. *Necrosis of Malar Bone.* Dr. H. G. CLARK.—Male, aged 25. The patient has syphilitic paralysis, nodes, rupia, &c. Two communicating fistulæ under the right eye lead to dead bone. The sinus was laid open, and the necrosis removed with the gouge.

3. *Tumor of Superior Maxilla; Excision.* Dr. H. J. BIGELOW.—Four months ago, a small tumor made its appearance midway between the left ala of the nose and the internal angle of the eye. It gradually increased, involving successively different portions of the superior maxillary region, until within three weeks, since which time the superficial portions had grown very rapidly, two large protuberances having formed just below the malar bone. The left nostril was occluded, and vision was obstructed by the mass protruding in front of the eye. Its surface was nodulated, and the integument thin and quite vascular over the most prominent portions. To the touch, the growth was elastic. A curved incision was made through the cheek from the commissure of the lips to the superior border of the zygoma, and the flap thus formed reflected to the edge of the orbit. The first incisor tooth of the left side was extracted, and the external orbitar process at its junction with the malar bone, the zygomatic arch and the ascending nasal process of the upper jaw, were successively divided by the saw and forceps. The horizontal portion of the maxilla was divided from before backward with Liston's forceps—one branch in the mouth and the other in the nares. The