

## CHAPTER LIX.

### NERVE LESIONS PROPER AND THEIR TREATMENT BY STRETCHING.

STUDY of the preceding two chapters has prepared the reader to pass to a consideration of the present one.

Nerve-stretching was introduced as a surgical performance some twelve years back by Nussbaum, and, by reason of an occasional success found in the practice, has established for itself a position which attracts a certain amount of attention.

By nerve-stretching is meant the exposure of a painful nerve, the lifting of it from its bed, and the pulling of it.

Nerve-stretching, when practised, is to find signification wholly in diagnosis. To do the operation simply on the data of statistics is to engage in an unjustifiable procedure. The scientific meaning of the performance lies in breaking up areas of obstruction existing somewhere along the line of a nerve-cord, and not in the fallacy that a transmitting capacity is lessened, or that new impressions are made on the centre of origin. As illustrative, reference is to be made to an example of lesion of anterior tibial nerve referred to on page 864.

It happened in this case that an absolute cure of several years' standing was but comparatively lately replaced by a recurrence of the old pain, and, on application of the patient, arrangements had been about completed for repetition of the exsection. Apart from sympathy for the sufferer, much interest was excited in the mind of the writer, as he regarded the condition as identical with inflammatory obstruction, and one where stretching—*i.e.*, breaking up adhesions—was the indication, a conclusion which he expected the operation fully to indorse.

A few days before the one set apart for the meeting the patient, while descending some stairs leading from a chamber, caught his toes in an irregularity of the carpet, which accident compelled his foot to extreme extension, throwing the man forward on his face. A draggy snap is reported as being both heard and felt. There has not been a twinge of pain felt since.

Nerve-stretching, to be effective, must associate with extra- and not with intra-lesions. Where a distinction is recognizable, good will be found to attend operations practised in relation with the first, evil when in connection with the latter. The author is compelled to recognize out of his experience that a great many cases of neuralgia indicate a requirement for nerve-stretching. Unfortunately, in a majority of the cases, the reading of the indication

is very difficult. The writer has to admit mistakes or failures, as it may be thought well to distinguish them, which furnish him with sufficient reasons to recognize his lack of personal judgment in the direction. No diagnoses are more difficult, as a rule, to make out than these that relate with neuralgia.

Exposure of the main branch of a plastic-caught nerve, and the stretching of this, is not at all the indication. Recognition of the seat of lesion is to go before operation, and the exposure of a nerve is to be not farther away from the obstruction than permits the lesion being acted on by the force exerted; this applies particularly to nerves running at obtuse and at right-angled relations.

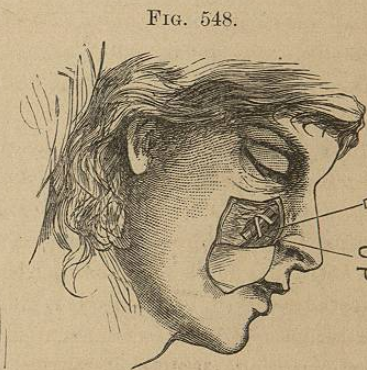
Nerves, like arteries, are exposed according to directions furnished by the anatomy of a part.

**Infra-orbital Nerve.**—The infra-orbital is the main continuation of the superior maxillary division of the trifacial nerve; its entrance upon the face is from the infra-orbital canal; the direction of change at the foramen is at a right angle; seat of lesion exists not infrequently at the orifice of the canal, being resultant of blows received upon the face.

Referring to Fig. 34 as a study, the student will recognize the nerve as breaking up, immediately on exit from the foramen, into three sets of radicles, which supply respectively the palpebral, nasal, and labial localities, consequently pain met with in these regions is plausibly referred to as related with the sensorium by the cord found at the foramen, and an inference is most likely to be indulged that exposure at such point affords command of the lesion. Here it is necessary to look beyond and consider that in the infra-orbital canal a branch is given off which supplies the anterior teeth, and that farther back is a second innervating the bicuspidati and molars,—situations much more likely to afford lesions than either of the first named. (Turn also to Figs. 26 and 36.)

To expose the infra-orbital nerve at its exit from the facial foramen, it is the practice of the author to feel for the depression, using the pulp of the little finger, and, when found, dissecting carefully to it by means of a single incision carried in the direction of the lip. The body exposed, a tenaculum is passed beneath it and the stretching accomplished, or it may be excised, as preferred.

A means of exposing the infra-orbital nerve, suggested by Professor Agnew, is shown in Fig. 548. Although the author disagrees with his valued and learned friend as to necessity for more than a single cut where



Exposure of infra-orbital nerve.

the object is simply stretching, he yet regards the experience sufficiently to know that his readers will find profit in study of the diagram.

**Inferior Maxillary Nerve.**—This nerve, which is distributed to the muscular and cutaneous portions of the lower lip, emerges from the dental canal of the inferior maxilla at the mental foramen. (See for study Fig. 37.) To reach it within the canal an operation is practised as shown in

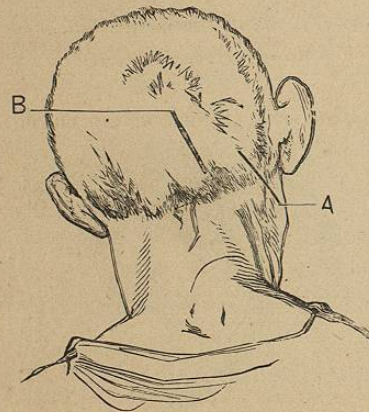
FIG. 549.



Auricularis magnus nerve exposed.

Fig. 549. To expose it superficially an incision is to be made, beginning at a point opposite the inferior second bicuspid tooth and continued forward to

FIG. 550.



Line of incision for exposing auricular and occipital nerves.

FIG. 551.



Exposure of occipital nerve and artery.

the cuspidatus; the situation is to correspond with the apices of the tooth-roots. A second manner of exposure excises the alveoli-labial floor, and finds

the nerve by aid of tenaculum and knife; difficulty lies in interference by the free hemorrhage.

**Auricularis Magnus Nerve.**—Fig. 550 exhibits an exposure of the part. This nerve, a branch of the superficial cervical plexus, which supplies the auricle and the parts about the mastoid process, is found least covered at a point about half an inch posterior to the lowest point of the lobe of the ear. (See for study Fig. 26, 2, 3, 29, 31.) The cut shows a manner of exposure; a single curvilinear incision corresponding with the line of the lobe as it ascends to join the tragus. (See Fig. 550, A.)

**Great Occipital Nerve.**—Taking advantage of still another cut furnished by the publishers, location and exposure of occipital nerve and artery are shown: Fig. 551. N, nerve; OA, artery. The occipital is a branch of the cervical; it supplies the integument of the scalp as far forward as the vertex.

**Lingual Nerve.**—See Vanzetti's operation, page 569, also see page 874.

**Supra-orbital Nerve.**—The supra-orbital is the continuation of the ophthalmic division of the fifth nerve; its branchlets supply the upper eyelid, the orbicularis palpebrarum, occipito-frontalis, and corrugator supercilii muscles, also the periosteum of frontal and parietal bones; neuralgic phenomena are frequent associations with it; diagnosis is apt to be very confused. The situation of this nerve upon the forehead is at the supra-orbital notch. It lies, as its trunk is concerned, upon the periosteum, being covered by skin, fascia, fibres of occipito-frontalis and corrugator supercilii muscles. Exposure is effected by means of an oblique incision. Direction of cut, and anatomy of relation, are shown in Fig. 552.

FIG. 552.



Exposure of supra-orbital nerve.