

On the suggestion of the President, Dr. LACK said that he would hand the specimens to Dr. Pegler for the consideration of the Morbid Growths Committee.

Dr. DONELAN showed *A Case of Perforation of the Nasal Septum. Trauma or Syphilis.*

The patient, an Italian, aged forty-two, denied ever having had syphilis, but admitted having had gonorrhœa about twenty years ago. He used to suffer from bad headaches for about a year, and conceived the extraordinary idea that by "punching" his nose and making it bleed the headaches would be relieved. He said that this treatment had been successful, but it, unfortunately, had set up a chronic epistaxis, from which he had suffered almost every day for eight years. During this period he used to pick his nose a good deal with his fingers. The epistaxis continued until about a year ago, when he was treated in Milan with a gray ointment, which was rubbed on the outside of the nose. He was positive that it had not been applied anywhere else, and that the epistaxis had ceased completely in a few days. A purulent discharge, with formation of crusts, followed, and had continued until the present time. There was a very large perforation in the septum, as well as considerable depression of the lower third of the nose, and a marked fold in the right ala. In spite of his assertion, taking into account the nasal and pharyngeal appearances, as well as the general aspect of the man, Dr. Donelan was inclined to think the deformity due to syphilis.

The PRESIDENT was strongly inclined to think this a case of syphilis.

Abstracts.

MOUTH, PHARYNX, NASO-PHARYNX.

Cushing, Harvey.—*The Taste Fibres and their Independence of the Nervus Trigemini.* "John Hopkins Hospital Bulletin," March, 1903.

It is pretty generally accepted that all taste fibres reach the cortical centre via the trigeminal nerve—those anterior to the circumvallate papillæ traversing the chorda tympani (bound up for a short distance with the gustatory nerve), facial nerve, geniculate ganglion, great superficial petrosal, Meckel's ganglion, and the second division of the maxillary nerve; whilst those posterior to the papillæ pass along the glosso-pharyngeal, its tympanic branch, lesser superficial petrosal, otic ganglion, and the inferior division of the maxillary nerve.

The evidence usually adduced to substantiate the trigeminal route is that pure intracranial lesions of the facial and glosso-pharyngeal nerves are unattended with loss of taste in the area corresponding to their lingual distribution, whereas a similar lesion of the trigeminus at the Gasserian ganglion, or above it, involves loss of taste in the entire half of the tongue. This view is held by Gowers and Purves Stewart. The latter states, in his text-book:¹ "It is highly probable that all the taste fibres enter the brain via the Gasserian ganglion, for on division of the fifth nerve in man above the ganglion, though the glosso-pharyngeal remains untouched, there is total loss of taste on the whole of the affected side."

The writer's investigations, which have been somewhat extensive, and attended with uniform results, are at variance with Gower's findings and the opinion of Purves Stewart.

Dealing with that portion of the tongue innervated by the glosso-pharyngeal nerve and the result of ganglion extirpation, he says no interference with taste-perception posterior to the circumvallate papillæ has been observed, neither does he find this has been the experience of others.

Gowers believes that taste may be preserved for a time after ganglion extirpation, owing to peripheral terminal communications between branches of nerves supplying the two sides of tongue, thus enabling impulses to pass from the paralyzed side via the nerve of the sound side. These communicating fibres soon atrophy; here may, therefore, be a source of fallacy, taste-perception remaining intact for a time, but finally disappearing.

After carefully investigating a series of thirteen cases of ganglion extirpation the writer takes an entirely different view, for he found there was invariably an early disappearance of taste-perception in the anterior two-thirds of the tongue, succeeded by its more or less complete return.

This transient abrogation of function, he considers, may be induced by post-operative swelling of the lingual nerve, consequent on ganglion extirpation resulting in pressure on fibres of the chorda tympani; that the latter are not generally permanently damaged is evident from the early return of taste in such cases.

In endeavouring, by his paper, to negate the trigeminal route theory, the writer is of the opinion that the view taken by many as to intracranial lesions being unattended by loss of taste, requires further confirmation by experimental investigation, for he considers it quite possible the *pars intermedia* can escape damage, even if the lesion be of such a degree as to induce complete facial paralysis.

Embryological investigation shows the seventh nerve to be a mixed one, the afferent sensory portion being represented by the *pars intermedia*. His has demonstrated the chorda tympani and great superficial petrosal nerves in lower vertebrates and man to be portions of the facial nerve; and if they be, as he considers, developmentally outgrowths from the geniculate ganglion, they would be afferent nerves and not transmit impulses to the Gasserian ganglion, conforming to the requirements of the trigeminal route theory. *H. Clayton Fox.*

¹ "A Manual of Medicine," Allechin; vol. iii., "Diseases of the Nervous System." 1901. p. 234.