

father and uncle of his own patient were affected in the same way, also an aunt and a sister. In this instance there seemed to be some family peculiarity.

(To be continued.)

Abstracts.

LARYNX.

Greene, D. C.—*Review of Cases of Cancer of the Larynx treated in the Wards of the Massachusetts General Hospital since 1874.* "Boston Med. and Surg. Journ.," vol. clvi, No 25, p. 811.

Twenty-four cases: In twelve the diagnosis was not confirmed by the microscope, all advanced cases in which, with one exception, palliative tracheotomy for the relief of dyspnoea was performed. Diagnosis was made by laryngoscopic examination.

Age.—Youngest twenty-seven, oldest seventy-three. Greatest number of cases (eight) was between fifty and sixty, and between forty and fifty and sixty and seventy there were six each. Only two were under forty-five.

Sex.—Twenty men, four women.

Operations.—None in two (these died of asphyxia, one in hospital, one three months after leaving). Tracheotomy in twelve, all but one survived for several months, one for three years; in all the disease was very extensive. Epiglottidectomy by subhyoid pharyngotomy in two (both died from pneumonia two and four days later respectively). Laryngotomy in three (one case died eight hours after, one had recurrence in two months, one was still without recurrence after four years). Total laryngectomy in four (one died from shock, one from aspiration pneumonia, one died of recurrence in five months, one had recurrence in four months). Mortality in the ten operations for cure was 50 per cent. Recurrence 30 per cent., no recurrence in 20 per cent.

In the twelve cases histologically examined epithelioma was found in ten, medullary cancer of epiglottis in one, adeno-carcinoma in one (the latter was excised without removing larynx, and forms the tenth of the operations for cure).

The author insists that every case of hoarseness in a person over forty years of age, persisting for two or three months without improvement, should be examined with the laryngoscope. *Macleod Yearsley.*

Kuttner, A. and Meyer, E. (Berlin).—*Does the Recurrent Laryngeal Nerve in Man contain Sensory Fibres?* "Arch. für Laryngol.," vol. xix, Part III.

The writers of this paper dissent from the view of Massei that paralysis of the recurrent laryngeal nerve is associated with more or less diminution of sensation, and that this nerve, therefore, contains sensory fibres. They examined with the laryngeal sound twenty cases of recurrent and postic paralysis of different origins, some unilateral and some bilateral, and could in none of them detect any decrease of sensibility below the normal. Since, however, it could not be denied that any possible loss of sensation might be imperceptible in the presence of the

still intact superior laryngeal nerve, the authors endeavoured to produce an experimental paralysis of this nerve, before its passage through the thyro-hyoid membrane, by the subcutaneous injection of an adrenalin-novocaine solution. Should, then, the affected side of the larynx become completely insensitive, the question as to the presence of sensory fibres in the recurrent laryngeal would be decided in the negative. Owing, however, to the impossibility of ensuring that the action of the injected fluid was confined to the desired spot, the experiments led to no definite conclusions.

Great aid, however, towards the solution of the problem was afforded by a case of carcinoma which came under the observation of the writers. The disease involved the left sinus pyriformis and had spread to the lateral wall of the pharynx. Sensation and movement of the larynx were normal. At the operation of partial resection of the pharynx and larynx the left superior laryngeal nerve was divided before its passage through the thyro-hyoid membrane. The result was that the left side of the larynx became completely insensitive, but showed no alteration in its movement, voluntary or involuntary. The authors consider that this result affords very strong confirmation of the opinion to which their examination of patients with recurrent paralysis has led them, namely, that the recurrent laryngeal nerve contains no sensory fibres.

Thomas Guthrie.

NOSE.

Levinger (Münich).—*Pneumocele of the Frontal Sinus*. "Arch. für Laryngol.," vol. xix, Part III.

Hajek and Warren have each reported a case of pneumocele in association with empyema of the frontal sinus, and these the author of this paper believes to be the only examples of the condition hitherto recorded. The following case, therefore, he considers of some interest. A man, aged thirty-six, underwent an operation after the method of Killian for empyema of the left frontal sinus of two years' standing. Healing after the operation was rapid and complete, but about six months later there appeared, on blowing the nose, a large bulging of the frontal sinus region, together with subcutaneous emphysema in the neighbourhood. The swelling and emphysema rapidly subsided, but recurred each time the nose was blown. The nasal cavity was free from pus. An operation was undertaken with the object of producing a firmer scar. What had before been the frontal sinus was again laid open and was found to be occupied by very loose cicatricial tissue. The walls were scraped with a sharp spoon and the inner angle was packed, the rest of the wound being sutured. The patient was warned not to blow his nose forcibly. Three months later there was no trace of bulging, and the cosmetic result was as good as after the first operation.

At the original operation Killian's mucous membrane flap was employed, and thereby the growth of granulations in the region of the fronto-nasal duct was greatly limited. The writer regards it as possible that the resulting weakness of the scar may have been responsible for the later trouble.

Thomas Guthrie.

Denker, A. (Erlangen).—*On the Operative Treatment of Malignant Nasal Growths*. "Arch. für Laryngol.," vol. xix, Part III.

The author of this paper reports two cases of malignant endo-nasal growth, treated by an operation which he has recently devised for disease