The author considers that although retrogression may take place when adult life is reached, operation is indicated owing to the risk of hæmorrhage, deformity, and interference with articulation, deglutition, and respiration.

The possible methods of operation are by means of snare, cautery, or scissors through the natural passages, or access is obtained to the tumour by an artificial route created by a preliminary operation.

The author strongly favours removal by means of a powerful snare introduced through the nose, stating that, according to Delavan, not only is there less risk, but recurrences are not more frequent after operations by this method than through an artificial route. The author has operated upon three cases by this method without shock or severe hæmorrhage, and there has been no recurrence in either case—now nine, six, and one year after operation respectively. In each case the growth was pedunculated. *John Wright.*

EAR.

McDonald, C. L. (Cleveland, Ohio).—Results of the Treatment of Otitis Media by Vaccine Therapy. "Journ. Amer. Med. Assoc.," June 3, 1911, p. 1647.

The cases selected for treatment were arranged in two classes—subacute and chronic. In thirteen subacute cases the *Staphylococcus albus* was found to be the causative organism twelve times and the pneumococcus once. The ear disease followed measles, pneumonia, scarlet fever, or influenza. All were treated by an autogenous vaccine, and all got well, and the author concludes that "no class of cases respond more readily to bacterial therapy than do cases of subacute otitis media."

Seventeen chronic cases, classifying as such those cases in which the discharge had lasted for three months or longer, were submitted to the treatment. Benefit was obtained when the discharge was slight and without much odour. Infections of staphylococcus, streptococcus, and pneumococcus, either alone or combined, were markedly improved or entirely cured, cases with mixed staphylococcus and *Bacillus pyocyaneus* proving the most obstinate. In nine cases a short motile bacillus, Gram-negative, was found, and vaccination with this organism produced little or no improvement. One case, giving pneumococcus at one time and staphylococcus at another, was temporarily cured by vaccination, but the discharge always recurred a few weeks after the treatment was stopped. In some cases, again, the treatment was followed by a lessening in the quantity of discharge, but at no time did it entirely disappear. Of the seventeen chronic cases three recovered completely, five were improved, and nine showed no change. The author advises vaccine therapy, therefore, in subacute cases, but thinks it of no special value in chronic cases. It may be tried, however, when other measures fail. *Dan McKenzie.*

Luigi, Umberto (Torrini).—Otalgia. "Rev. Hebd. de Laryngol., d'Otol. et de Rhinol," April 29, May 6, and May 13, 1911.

This paper contains a full account of the conditions which give rise to otalgia, that is, pain in the ear of a neuralgic nature as distinguished from pain in the ear due to a lesion in the ear itself (otodynia).

The author classifies these conditions according to the nerve in whose field of innervation they are situated, and he traces in each class the nervous connection between the site of the lesion and the ear:

(1) Superior maxillary division of the fifth nerve, *e. g.* diseases of the mucosa of the nose and accessory sinuses, the soft palate, and the upper alveoli and teeth.

(2) Inferior maxillary division of the fifth nerve, *e. g.* diseases of the lower teeth, gums and jaw, the parotid gland, the temporo-maxillary articulation, the tongue, and the sublingual gland.

(3) Glosso-pharyngeal nerve, *e. g.* diseases of the base of the tongue, lingual and palatine tonsils, and pharynx.

(4) Pneumogastric nerve, *e. g.* diseases of the epiglottis, larynx proper, subglottic region, and œsophagus.

(5) Facial nerve (it is pointed out that the facial nerve should not be regarded as a purely motor nerve), *e. g.* herpes.

(6) Superficial cervical plexus, *e. g.* cervical adenitis.

(7) Carotid sympathetic, *e. g.* carotid aneurysm.

(8) Hysteria.

(9) Various conditions, *e. g.* neuritis and perineuritis of toxic origin, malaria, syphilis, blood diseases, affections of the Gasserian ganglion, sexual organs, etc.

The pain of otalgia may be felt in the auricle, the external auditory meatus, or the tympanic cavity. Sometimes it is spontaneous with quiet intervals and exacerbations; sometimes it is elicited only by pressure or rubbing, or by movement of the diseased parts. It is usually worse at night, and is often increased by cold.

The diagnosis of otalgia is based on the absence of any lesion in the ear likely to cause pain, and the presence of one or other of the conditions noted above.

The prognosis is usually that of the causal lesion. If, however, the causal lesion is of a progressively destructive nature, the nerve endings may be destroyed, and thus the otalgia may disappear. Hysterical cases are usually easily cured if recent, but if chronic are often very stubborn.

As regards treatment, the causal lesion should, of course, be attended to. Local therapeutic measures include sedative instillations into the external auditory meatus, blisters over the mastoid, the galvanic current, Eustachian injections of chloroform, ether, turpentine, amyl nitrite, etc.

John M. Darling.

Blake, C. J.—Consideration of the Mechanism of Pressure in the Production of Vertigo, and Report of Cases. "Boston Med. and Surg. Journ.," September 28, 1911, p. 469.

The author has already written upon this subject. His hypothesis is that, while moderate degrees of variation from the constant of the ampullary end-apparatus could be compensated for by the provisions for movement in the normal sound-transmitting apparatus, and in the aqueducts, greater degrees of variation, either beyond the possibility of normal compensation, or inhibition of the normal compensation itself, would be productive of symptomatic results unless the inhibition had been one of such slow increase as to permit of gradual accommodation to the abnormal conditions, evidenced, for instance, in cases of progressive stapes fixation, or of progressive contraction of the tensor tympani muscle. In this paper he deals more especially with the effects of lumbar puncture upon vertigo, promising to follow it later with a tabulation of cases and the addition of observations on caloric nystagmus, and he asks for comparative observations from others upon the value of lumbar puncture. He gives notes of ten cases. *Macleod Yearsley.*