were variable or lacking. Loss of vision in only one case (of hypophysis tumour) from involvement of optic nerve. Discharge was mostly mucopurulent, in two cases forming crusts. Three died; two acute cases recovered; three were benefited by operation; one had no treatment.

Macleod Yearsley.

Murphy, John.—Accessory Nasal Sinus Suppuration. "Australian Medical Journal," June 20, 1914.

In suppuration of the maxillary sinus the author recommends that the sinus should be explored under the inferior turbinal. It should now be washed out with normal saline solution till the fluid comes away clear; it should then be dried by forcing air through. If after drying this pus still appears under the middle turbinal, we may conclude that the frontal sinus in the anterior or middle ethmoidal cells contain pus. If after removing the anterior end of the middle turbinal and washing out the frontal sinus, pus is still present in the middle turbinal region, it will be coming from the anterior or middle sphenoidal cells. Pus above the middle turbinal is from the posterior ethmoidal cells or sphenoidal sinus. The notes of nine cases submitted to operation are given.

A. J. Brady.

## LARYNX.

Price Brown (Toronto).—Spindle-cell Sarcoma of the Larynx. "Canadian Practitioner," December, 1911.

On February 17, 1911, a young man, aged twenty-three, tall, anæmic and thin, was referred to the writer for treatment. He had been suffering from soreness of left side of throat with gradually increasing stenosis for two months. Swallowing was difficult and painful. Fluids went down easier than solids. Night cough. Respiration difficult but easier through nose than mouth. Worked as lithographer up to previous day.

Examination.—Nose and naso-pharynx normal. A large, dark-red, corrugated tumour filled the larynx on the left side. It was widely sessile. It seemed to be attached to the whole length of the left ventricular band, the commissure, the left arytænoid, and the left hyoid region. The epiglottis was unaffected externally; but internally the whole of the left side seemed to be involved. As the voice was clear, though muffled, the vocal cords were believed to be unaffected. The tumour resembled a huge dark strawberry hiding the whole of the entrance to the larynx on the left side, overlapping it into the pharynx, and leaving merely a narrow slit on the right. Externally the adjacent glands in the neck were slightly enlarged and tender.

The diagnosis at the time was malignant disease. Several days later pathological examination of a large segment proved it to be spindle-cell sarrows.

Believing from the size and position of the growth that operative treatment per vias naturalis would be more effectual than external operation, electro-cautery operations were at once commenced, and continued at varying intervals of twelve hours up to one week until June, when the case was reported at the annual meeting of the American Laryngological Association. By that time the patient's weight had increased from 124 lb. to 140 lb. The great bulk of the rapidly growing

tumour had been removed; but as it continued to develop in the region of the left ventricular band and thyro-hyoid region, electro-cauterizations were still required. His appetite was good, swallowing perfect, and pain almost gone.

By the middle of June the patient was able to resume his occupation, and has continued his daily work for the last five months. The growth of the sarcoma, however, still requires the control of the cautery at varying

intervals.

During all the earlier months of treatment anæsthesia was induced by local application of cocaine and adrenalin, the strength of the former being 10 or 15 per cent. solution. Latterly the relief from pain was unsatisfactory; and a long curved submucous syringe was made on the design of the writer, so that injections could be given directly into the mucosa of the larynx—the pain of operation was by this means very much diminished. At the present time, ten months after first seeing the patient, the prognosis is doubtful, although the control is still in hand.

Note.—The hæmorrhages during the earlier treatments were exceedingly severe. As the tumour diminished in size the bleeding became less. Latterly with each operation it is very slight. The sloughs following cauterization were, during the earlier stages, removed by laryngeal forceps or snare. Latterly the little sloughs that form are expectorated between the treatments. The cautery knife has always been used at an intense heat—dull red being ineffectual as a destructive agent. The voice of the patient has always sustained its strong, hoarse, vibrating power. And last: the power of deglutition has never been impaired by the prolonged series of electro-cautery operations, neither fluids nor solids having found an entrance into the larynx.

Author's abstract.

## Thomson, Sir StClair (London, England).—Intrinsic Cancer of the Larynx. "The Journal of the American Medical Association," September 19, 1914.

In reporting a case of complete excision of an epithelioma of the vocal cord apparently affected by endo-laryngeal operation, Sir StClair Thomson emphasises the remarkably satisfactory treatment of intrinsic cancer of the larynx by laryngo-fissure, and draws the following conclusions:

(1) Cancer of the vocal cords is, in early stages, a very slowly progressive and strictly limited process. Alteration of voice is the principal

and may be the only symptom.

(2) Diagnosis is based chiefly on inspection of the larynx. Only in certain cases in which the growth is a superficial and not an infiltrating one can it be confirmed by microscopic examination.

(3) The growth can sometimes be completely removed by endo-

laryngeal operation in early cases.

(4) Laryngo-fissure is the operation of choice in all cases of endo-

laryngeal cancer.

(5) The operation offers the very best prospects, because the disease remains for some time superficial and limited, and secondly, because laryngo-fissure cannot be considered a dangerous operation.

(6) No patient has been lost by operation, and statistical results show a lasting cure in 80 per cent. of cases.

Birkett (Rogers).