1st October.—Swelling of right upper eyelid occurred. This was incised but no pus found. Simple mastoidectomy; lateral sinus exposed but did not appear to be thrombosed. Some lymph present on surface of sinus.

2nd October.—Left upper eyelid became swollen. Temperature again rose to 105° F. Death supervened.

Post-mortem.—Pus in both cavernous sinuses and in lower part of lateral sinus. Glands of neck not enlarged. Films showed streptococcus.

Specimen and Microscopic Slide of Papilloma of External Auditory Meatus — E. WATSON-WILLIAMS, M.C., F.R.C.S.E.—Specimen removed at operation because the pathologist thought the fragment first submitted was malignant. Patient was a male, aged 52; clinically the growth was a typical benign papilloma. It covered the whole anterior wall of the auditory meatus; a hyperostosis was present in the posterior meatal wall.

Specimen showing Bony Ankylosis of Malleus and Incus —E. WATSON-WILLIAMS, M.C., F.R.C.S.E.—Shown for comparison with similar specimen exhibited 8th November 1924 (*Journal of Laryngology and Otology*, Vol. xl., p. 125, 1925). Male, aged 35, had severe pain in ear and head; right ear "stone deaf" for years; free aural discharge; no vertigo. The ossicles were removed during a radical mastoid operation. There appears to be complete obliteration of the joint between them. The bones are intact, except that the tip of the processus gracilis is missing. Of especial interest are the osteophytic outgrowths on the long process of the incus. The fold of mucous membrane between the two bones is discernible. It is suggested that this condition is not of great rarity, although seldom reported.

PROCEEDINGS OF THE FORTY-NINTH ANNUAL CONGRESS OF THE AMERICAN LARYNGOLOGICAL ASSOCIATION.

May 23, 24, 25, 1927.

(*Abstracted from the Notes of Dr Charles J. Imperatori.*)

Five Cases of Frontal Lobe Abscess secondary to Frontal Sinus Disease.—The cases were presented by Dr Imperatori, and the following points were analysed. All the patients were under 28 years of age, two of them being young girls of 14 and 15 years respectively; the remaining three were aged 21, 25, and 27. In each instance the disease involved the frontal and ethmoidal air cells, and manifested itself externally by the presence of œdema of the eyelids, chemosis, or even by an abscess of the orbit.

https://doi.org/10.1017/S0022215100031790 Published online by Cambridge University Press

In four the brain abscess was on the right side and in one in the left lobe. In four (three right and one left) the abscess was on the same side as the diseased air sinus, but in one with left-sided sinus disease the abscess was in the right frontal lobe. The method of invasion of the cerebrum and the position of the abscess were analysed, both being points of considerable clinical importance. In the four homolateral cases, infection had taken place by direct extension through the posterior osseous wall, the pathway being indicated by a circumscribed osteomyelitis in three, but not demonstrable in the fourth. In the case of the contralateral abscess the infection was metastatic. In this case the abscess was situated in the region of the right cribriform plate. Of the four homolateral abscesses, one was situated in the anterior part of the lobe, two in the area of the cribriform plate and one in the posterior part of the frontal lobe, an epidural abscess being first located in the mid-parietal area.

The *Staphylococcus aureus* was found in all the cases. The leucocytosis in each case was over 15,000, and the polynucleosis was over 80.

The prominent symptoms were grouped as follows:—(1) Headache, especially at night, and located on the side on which the abscess was found; (2) occasional vomiting; (3) some changes in the optic discs, an optic neuritis when the abscess was localised; (4) high temperature towards morning; (5) pulse rate usually in relation to the temperature, and in no case a low rate; (6) insomnia, some mental dullness and poor memory dependent on the progress of the brain destruction; (7) convulsions (three of the patients with right-sided abscess had convulsions); (8) optical aphasia; (9) diminished abdominal reflexes contralateral to the abscess; (10) usually exaggerated knee jerks and ankle clonus.

Operation was performed in each case: three recovered; of these, one was known to be alive two years later, one was still alive and well, and one died fourteen months after operation. Two died, one in thirty-six hours, and one within a week of the operation.

Dr Osnato of New York, speaking in the subsequent discussion as a neurologist, drew attention to the condition of the reflexes in these cases. In the early stages of the abscess the abdominal reflexes were disturbed on the side opposite to the lesion, being diminished and sometimes absent. When the lesion, however, became more extensive and was associated with meningitis, as so many of the frontal lobe abscesses were, then the abdominal reflexes were diminished on both sides. When the abscess was situated at or in the vicinity of the Rolandic area, the ascending frontal convolution, changes were met with in the reflexes on the side opposite the abscess. The abdominal reflexes on the same side were diminished, but the deep reflexes on the opposite side were exaggerated, and on the side of the exaggerated reflex there might be a Babinski reflex.

https://doi.org/10.1017/S0022215100031790 Published online by Cambridge University Press

American Laryngological Association

Malignant Tumour of the Nasal Sinuses: A Further Report on the Results of the wide, open Operation followed by Immediate Irradiation, was presented by Dr Harry A. Barnes, Boston.

In 1920, at the annual meeting of the American Laryngological, Rhinological, and Otological Society, he reported a series of cases of malignant tumours of the nasal sinuses in which the treatment consisted of a combination of operation and radiation. The procedure was based on Moure's lateral rhinotomy, but it had two important and radical additions which were designed to overcome certain inherent difficulties in the treatment of malignant growths in this region. These additions were: first, the cutting away of the soft tissues of the cheek so as to leave a wide, permanent opening in the face; and second, the immediate radiation of the operative field.

Of the seventeen patients with carcinomata, seven were well and without evidence of recurrence after periods of ten months, fourteen months, fifteen months, four years, five and a half years, eight years and nine years respectively (41 per cent.). Of the eight patients with sarcomata, five were well and without evidence of recurrence after periods of thirteen months, four years, six years, eight years, and eight and a half years respectively; while one patient was well and without evidence of recurrence at the time of his death by accident, three years after the operation (75 per cent.). Of the total twenty-five cases, in thirteen (52 per cent.) the treatment was successful; in two cases the local result was successful, but the patients died of distant metastases; one of these, a patient with carcinoma of the ethmoid, died with metastasis in the bodies of the dorsal vertebræ sixteen months after operation; the other, a patient with small round-cell sarcoma, died of sarcoma of the liver four years after operation.

In the discussion which followed, Dr W. B. Chamberlin stated that in each of three cases of malignancy of the antrum and the ethmoid there was marked exophthalmos. In all of these patients a Caldwell-Luc operation was performed and radium emanations were applied. All the patients had apparently recovered and had remained without recurrence for three years.

Dr T. E. Carmody said that when there was only involvement of the maxillary sinus, he approached the disease through the mouth, and used the soldering iron and diathermy.

In a number of these cases he had had marked success, the longest period of observation of a case being about seven years.

Laryngeal Complications of Irradiation.—This paper was presented by Dr Louis H. Clerf, who, from personal observations on the untoward effects of irradiation of the neck, said it was evident that these powerful therapeutic agents were potential sources of danger.

https://doi.org/10.1017/S0022215100031790 Published online by Cambridge University Press

Tissue sensitivity, individual susceptibility, cumulative effect and filtration were problems for the experienced radiologist.

Irradiation had no place in the treatment of recurring papillomata of the larynx in children. It was evident that the use of radium exerted no inhibitive influence or curative effect on papillomata. Its use was always a potential source of danger and should be condemned. Indiscriminate treatment of cancer of the larynx by irradiation should be discouraged. In operable cases of cancer, treatment should not be administered except on the advice of the surgeon and radiologist.

Dr D. Bryson Delavan said that during many years of the study of laryngeal cancer many new propositions, ideas, and methods had been proposed and tried, but the disease continued to exist. Many had died from it; a few had been relieved, or were still praying for the time when an actual cure should be found. No suggestion, therefore, offering a possibility of advance, should be ignored.

With regard to radium, the examples of injury attributed to it when first exhibited would seem due to its misuse. While opinions were conflicting as to the value of radium in laryngeal growths, properly applied, it had by no means always given the results which had just been indicated to us. While many insisted that surgery was the only reliable procedure, might there not be certain cases amenable to cure by radium? He thought there were. At the Memorial Hospital, New York, he had been treating a number of patients for several years past and had obtained certain results.

The value of radium in the cure of papilloma of the larynx was first demonstrated by Dr Robert Abbe of New York many years ago. While it might not be effectual in the multiple papillomata of children, its value in other forms had been found.

Dr Samuel Iglauer said that about one year ago he had collected a series of cases of necrosis of the larynx following Roentgen-ray treatment for carcinoma and other diseases. These necrotic cartilages were not due to the carcinoma because it occurred in other cases, for instance, when the neck had been treated for tuberculous glands, goitre, and other conditions. Hence, the destructive action must be due to the Roentgen ray, and not to disease.

One could never tell, if one radiated a patient's larynx, whether or not that patient would subsequently undergo this late reaction. Marschik had given a name to it; he called it perichondritis radio-therapeutica—a distinct disease.

Dr Chevalier Jackson said it seemed important to draw a sharp line of distinction between cancer of the larynx and multiple papillomata of the larynx, especially in children. Multiple papillomata of the larynx constituted in many cases a benign self-limited disease that got well if left alone. Conservative treatment was imperative. With cancer

https://doi.org/10.1017/S0022215100031790 Published online by Cambridge University Press

of the larynx, if left alone, there was only one end—the limit was life itself. Radical treatment was justifiable.

Dr Louis H. Clerf reiterated the view that the Roentgen ray and radium were to be condemned in the treatment of multiple papillomata of the larynx in children.

The Early Diagnosis and Treatment of Epiglottidean Tuberculosis. — Dr Frank R. Spencer pointed out that usually tuberculous invasion of the epiglottis was only a small part of the picture when the entire larynx was tuberculous. It was usually the most painful and the most rapidly fatal localisation in the larynx, especially when all the epiglottis was involved. On the other hand, the rest of the larynx sometimes showed so little involvement and the epiglottis relatively so much, that tuberculosis of the epiglottis was the chief problem confronting the laryngologist. The importance of this situation was accentuated when the chest expert reported that the pulmonary disease was limited to the left upper lobe and the right apex, with an excellent prospect for an early arrest of the pulmonary disease and later an ultimate cure, if the larynx could be cured; the pulmonary disease anyway offered a good chance for an ultimate cure.

Tuberculosis of the epiglottis had too often been considered a late symptom, when it might be an early manifestation, so far as the larynx was concerned. Therefore, if the epiglottidean tuberculosis could be arrested or cured, the patient's life could sometimes be saved. Invasion of the epiglottis as a late symptom of laryngopulmonary tuberculosis was of necessity not the subject under discussion in this paper.

The four most important methods of treating epiglottidean tuberculosis were: (1) rest of the voice either by absolute silence or whispering; (2) heliotherapy; (3) the cautery; (4) amputation.

Dr B. R. Shurly said this subject was one of great interest to him, and the trend of the times was certainly to take these cases out of the field of the laryngologist and into the care and direction of the sanatorium worker. They were essentially sanatorium cases. Invariably they involved some pulmonary lesion, and the question of the therapeutic result in the laryngeal treatment was, in large measure, in close relationship to the progress of the pulmonary lesion and the involvement or the extent of the involvement, and the question of whether one had to deal with a case that could be treated by artificial pneumothorax.

It was his observation that this work had almost been standardised in the last few years, and that out of the great and enormous number of therapeutic measures that had been advocated for many years in the past, there were only a few that stood out and showed the actual value of the results. It was undoubtedly true that about 15 per cent. of the patients with laryngeal involvement were in sanatoria. In more than fifteen years' service in his own city, the number had varied between

https://doi.org/10.1017/S0022215100031790 Published online by Cambridge University Press

13 and 17 per cent. during that time. Of this number, comparatively few showed these early manifestations in the epiglottis, and one had, therefore, to deal with them by the best methods available, such as the use of formaldehyde in increasing strength, and the solar laryngoscope. Of course, in the south-western parts of that country, in Arizona and New Mexico, where sunshine was so plentiful, the patients could enjoy climatic treatment at the same time as the solar laryngoscopic treatment, and they showed a decidedly greater increase in the number of cures than those in the northern climate. The reports of one institution down in New Mexico showed remarkable results in 50 per cent. of all the laryngeal cases under treatment with the solar method which Dr Spencer had presented.

When the ulceration was progressive in the epiglottis he had often performed the operation of amputation of the epiglottis, and while it was discouraging as to final result, because most of the cases were quite far advanced when this operation was necessary, there was certainly a great relief to the pain in swallowing. This assisted in the important question of the nutrition of the patient. He was sure that not over 1 per cent. of the laryngeal cases had involvement of the epiglottis.

In the discussion, two other points were emphasised by others of the speakers, the value of heliotherapy and the fact that the incidence of tuberculosis of the larynx was less frequent than formerly.

A. Logan Turner.

VIENNA RHINO-LARYNGOLOGICAL SOCIETY.

Meeting of July 5, 1927.

(*Report from the Monatschrift für Ohrenheilkunde*, October 1927.)

By Alex. R. Tweedie, F.R.C.S.

Tumour of the Soft Palate—F. J. Mayer.—Woman, aged 28, had a swelling to the outer and upper side of the right tonsil; it resembled a peritonsillitis, except that the mucous membrane covering it was normal and somewhat paler than the surrounding tissue. The tonsil was displaced downwards and quite obscured by the swollen pillar of the fauces, and the uvula was displaced to the left; the lateral pharyngeal wall was also displaced forwards. On palpation, the tumour suggested almost cartilaginous hardness. The corresponding lymphatic glands were not palpable.

It had been noticed for three years, but had increased in size during the last one and a half years, causing, however, no difficulty in speech or swallowing.

On 25th June 1927, under local anæsthesia, the tumour (about the size of a walnut) was enucleated easily by Professor Marschik.

https://doi.org/10.1017/S0022215100031790 Published online by Cambridge University Press