THE
JOURNAL OF LARYNGOLOGY,
RHINOLOGY, AND OTOTOLOGY.

Original Articles are accepted by the Editors of this Journal on the condition that they have not previously been published elsewhere.

Twenty-five reprints are allowed each author. If more are required it is requested that this be stated when the article is first forwarded to this Journal. Such extra reprints will be charged to the author.

Editorial Communications are to be addressed to "Editors of JOURNAL OF LARYNGOLOGY, care of Rebman, Limited, 129, Shaftesbury Avenue, Cambridge Circus, London, W.C."

A CASE OF LARYNGEAL PERICHONDritis IN A DIABETIC SUBJECT.

BY ARTHUR J. HUTCHISON, M.B., BRIGHTON.

A SCHOOLMASTER, aged about thirty, was brought to me by Dr. A. W. Williams on August 31, 1901, complaining of loss of voice of a few days' duration and of commencing pain on swallowing.

Patient had been an athletic youth, had never had syphilis nor any signs or symptoms of tuberculosis, but for five or six years—the exact date of onset could not be ascertained—he had suffered from diabetes mellitus. By careful dieting the amount of sugar in the urine could be to some extent controlled; but some sugar was constantly present in the urine, and at times the quantity was large. Besides teaching in the village school, the patient also trained and led the choir of the village church, yet, in spite of this over-use of the larynx, he had always been free from throat troubles.

About the beginning of July his general health began to deteriorate, and he noticed that after a day's teaching and work his throat felt tired, though his voice was not hoarse. His general condition growing steadily worse, he was advised to come to Brighton for rest and change of air in the middle of August. He came to Brighton, but, instead of resting, spent most of his time walking. About a week before I saw him he became hoarse, a few days later aphonic, and on the day I first saw him (August 31) commenced to have some pain on swallowing. On examining the throat, I found the pharynx and fauces rather hyperæmic. In the

larynx the left arytaenoid region was bright red and much swollen, the left vocal cord was of almost normal colour, but fixed near the middle line. The right side of the larynx was less affected, the movements of the cord seemed slow, and abduction was incomplete. There was no tenderness or swelling over the larynx externally.

On September 2 I was called to see the patient at his house, as he had had an attack of dyspnoea during the night, and the pain on swallowing had become so severe as to render that act almost impossible. I found the patient in bed, propped up on pillows and looking ill and weak. He complained chiefly of the pain on swallowing and of a constant pain in the neck. Respiration was regular, but accompanied by some stridor, and there was a distinct smell of acetone in the breath.

All that could be seen of the left side of the larynx was a large red swelling extending from the back of the arytenoid region to the epiglottis, completely hiding the left vocal cord. The right arytaenoid region was also considerably swollen, partly concealing the right vocal cord from view. This cord was still capable of some movement. Externally there was marked swelling with great tenderness over the larynx, chiefly on the left, but spreading to some extent over the right side.

I did not see the patient again, but was informed that during the day he had some attacks of dyspnoea, became comatose in the evening, and died early next morning. The dyspnoea may have been due in part to the laryngeal condition, or it may have been due to poisoning of the respiratory centre by the diabetic poison (acetone, β -oxybutyric acid, etc.). As already stated, there was stridor, but no actual dyspnoea, when I saw the patient; but the laryngeal swelling was such as would readily give rise to dyspnoea during sleep, or, still more, in a state of coma.

The rapidity with which the laryngeal condition developed was one of the striking features of this case; between the onset of slight hoarseness and the development of widespread perichondritis only a little over a week elapsed. The change in the patient's general and mental condition was, according to Dr. Williams, equally striking. Owing to the mental condition the treatment advised could not be carried out, as the patient would not stay in bed.

As to the nature of the laryngeal inflammation and perichondritis, nothing positive can be said. Syphilis can be definitely excluded. As regards tubercle, neither his medical attendant in the country nor Dr. Williams, who had known the patient intimately as a personal friend for several years, had ever noted

any signs of it. There was no cough, no expectoration, or other sign of tuberculous disease, but no examination of the chest had been made recently. Thus, all that can be said on this point is that, though tubercle had never been suspected, it cannot be definitely excluded. Again, there was no history of injury, either external or internal. The most probable explanation seems to be that, owing to the low vitality of the tissues resulting from the diabetes, the ordinary pyogenic micro-organisms were able to penetrate the laryngeal mucous membrane—perhaps through some slight abrasion—and to establish themselves and flourish in the deeper tissues. As no *post-mortem* examination was obtained, this question could not be definitely settled.

Laryngeal perichondritis appears to be a very rare complication in diabetes. When the larynx is affected in diabetes, the condition found is most commonly a laryngitis sicca; in cases with marked cachexia and anæmia, ulceration of the posterior laryngeal wall has been described; and in cases in which tuberculosis has developed in a diabetic subject, tubercular ulceration has been noted in the larynx, but this is rare. Thus, Hilton Fagge “searched the records of Guy’s Hospital . . . and found that in all of these cases (post-mortem examinations of seventeen cases of diabetes) it was either expressly stated that the larynx presented no tubercular ulceration, or, at least, no mention is made of that organ.” I have not had the opportunity of making a thorough search through the literature of the subjects, but in all the text-books and journals of laryngology that I have consulted I find no reference made to diabetes as a predisposing cause of laryngeal perichondritis, and in text-books of general medicine no reference to perichondritis as a complication of diabetes. For this reason I think the foregoing case worth recording.

NECROSIS OF THE OSSEOUS LABYRINTH—REMOVAL BY OPERATION.

BY RICHARD LAKE, F.R.C.S.

THE brief previous history of the case is as follows :

The patient, a man fifty-four years of age, first came under my treatment two years ago, and at that time gave the following history :

He had had discharge from the left ear for fifty years, and, as far as he remembered, had always been deaf with it; in fact, he