PATHOLOGICAL RESEARCHES
INTO THE
DISEASES OF THE EAR.

(SUPPLEMENT TO THE SEVENTH SERIES.)

SEBACEOUS TUMOURS IN THE EXTERNAL AUDITORY
MEATUS.

BY

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IN the forty-fourth volume of the 'Medico-Chirurgical Transactions' I gave an account of *eighteen* cases wherein sebaceous tumours, developed in the external auditory meatus, had caused absorption of the petrous bone, and in several of these cases caries had also occurred. In one of the cases alluded to, an abscess in the cerebrum, and in another, one in the cerebellum, had taken place.

Since the publication of the paper referred to, two cases of caries of the temporal bone from the presence of sebaceous tumours, and both of which proved fatal, have fallen under my notice; I therefore think it advisable to place them also before this Society. I hope by doing so I

may induce some of its Fellows to give attention to this very singular affection. It appears that sebaceous tumours may be developed in the substance of the dermoid meatus at any period of life, and they appear always to have the peculiarity of advancing inwards, and causing absorption of the petrous bone. The reason for their doing so is by no means obvious, inasmuch as there appears to be little or no perceptible impediment to their progress towards the free surface of the meatus, and to their extrusion through this canal. Not uncommonly, as in the two cases about to be detailed, the tumours make their way directly into the tympanic cavity, which they completely fill. The fact that the petrous bone is perforated by the pressure exercised by these soft tumours, formed merely of layers of epidermis, is another well-marked example of absorption occurring in the hardest textures when subject to continuous, though gentle, pressure. A fact worthy of notice is that the pressure of the tumour on the external meatus always causes simple absorption of the bony walls, whereas in the tympanic cavity its effect is to induce caries; and the irritation within the tympanum may also give rise to an abscess in the cerebrum or the cerebellum (according to the part of the tympanic cavity implicated), without the existence of any direct continuity of diseased structure from the tympanum to the brain. The peculiarly insidious manner in which sebaceous tumours make progress, often, indeed, scarcely betraying their existence until the appearance of severe, frequently fatal, cerebral symptoms, demands careful consideration, and should lead the medical man to make a thorough examination of the ear even when the slightest symptoms of irritation in the meatus are the cause of complaint. In the two following cases it would appear that the attention of the surgeon had not been called to the state of the ear until the supervention of the symptoms which ended fatally.

For the notes of the following case, and for the opportunity of dissecting the petrous bone, I am indebted to my

colleague Dr. Chambers, under whose care it occurred in St. Mary's Hospital.

CASE 19.—*Sebaceous tumour distending the tympanic cavity; caries of the petrous bone; death.*

N. F—, a girl æt. 16, was admitted into the hospital on December 21st, 1862; she had been ill two days with pain in her neck; she was unable to walk, and she kept her head thrown back. She went through an attack of scarlet fever seven months previously, but perfectly recovered, and was in service till within a few days of her admission. There was no history of deafness or discharge from either ear, nor was any discharge observed when the nurse washed her. Next day she seemed much better, and lay with her head naturally on the pillow. On the third day after admission she complained much of headache, started up in bed several times during the morning, but ate her dinner at one. Half an hour afterwards she suddenly died.

Autopsy.—The tentorium on the left side adjacent to the petrous bone was inflamed, and pus was effused upon it. The pia mater covering that part of the cerebellum beneath the inflamed tentorium was opaque, and a portion of the cerebellum itself, as large as a pea, was softened and of a green colour.

Dissection of the temporal bone.—The dura mater covering the posterior and upper part of the petrous bone was dark coloured and softer than natural, and the bone which it covered contained numerous small apertures. These apertures were so numerous and large in the sulcus lateralis, which forms the posterior boundary to the mastoid cells, that it assumed a carious aspect. The lateral sinus adhered less firmly than natural to the sulcus lateralis, and it contained a dark clot. *External meatus.*—At the upper and inner part, directly above the membrana tympani, was a soft yellowish mass of matter, composed principally of laminæ of epidermis; its removal disclosed a circular aperture in the upper osseous wall of the meatus, about a quarter of an inch

in diameter, its margins being well defined, and the bone around having a healthy structure. This aperture was also filled with a mass of epidermoid laminæ, and it communicated with the cavity of the tympanum. The membrana tympani presented two apertures, one anteriorly and inferiorly, the other posteriorly and inferiorly.

For the particulars of the next case, and for the opportunity of dissecting the diseased parts, I have to thank my friend Mr. Bullock, of Isleworth.

CASE 20.—*A sebaceous tumour in the external meatus, causing caries of the petrous bone, suppuration of the pia mater and death.*

A boy æt. 16, thin and not healthy looking, who was training for an army bandsman, was sent into hospital on February 7th, 1864, complaining of pain in and about his right ear; this he attributed to his having worn a damp cap a few days previously; there was no discharge from the ear, nor, indeed, any abnormal external appearance. A dose of calomel was administered, followed by a purgative, and, the pain continuing, twelve leeches were applied to the region of the mastoid process; a blister was also applied to the nape of the neck; in spite of this treatment, he rapidly became delirious. A week after admission an abscess was opened behind and below the mastoid process, and a large quantity of very offensive pus was discharged. The severity of the cerebral symptoms increased, nevertheless, and the patient died on the eighth day after admission.

Autopsy, three hours after death.—The brain was generally very vascular, and serum was effused in the ventricles. The outer surface of the middle lobe of the cerebrum was intensely congested, and the larger vessels contained coagula; the entire surface of the right hemisphere of the cerebellum was coated with fetid, green, purulent lymph, and the discoloration extended nearly half an inch into its substance. No abscess was detected either in the cerebrum or in the

cerebellum, the structure of the brain, with the exception just named, being apparently healthy. The dura mater was detached from the upper surface of the petrous bone, and the bone presented carious orifices. The dura mater over the posterior and outer surface of the petrous bone, and that forming the lateral sinus, was also separated from the bone by offensive pus, and there was also purulent lymph in the lateral sinus itself, together with a considerable coagulum. There was a considerable quantity of serum in the pericardium, purulent serum and lymph in both pleural cavities, and purulent deposits in both lungs.

Dissection of the temporal bone.—At the upper and inner part of the external meatus, close to the *membrana tympani*, was a mass of soft sebaceous matter, which extended, by means of an aperture nearly half an inch in diameter (formed partly in the upper part of the *membrana tympani*, and partly in the adjacent bony meatus), into the tympanic cavity, which it completely distended. There were small carious orifices in the upper wall of the tympanum, and also in the *sulcus lateralis*, which contained dark and fetid purulent matter.