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Sebaceous Epithelioma in the External Auditory Meatus: a case report

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ABSTRACT

We report a rare case of sebaceous epithelioma(SE) in the external auditory meatus of an 84-year-old woman. The tumor, measuring 1.5 cm in diameter, was hemispherical, yellowish-brown, elastic and hard. It was removed surgically without complications and there has been no recurrence two years postoperatively.

The histopathologic findings were characteristic of a sebaceous epithelioma. The controversy over the origin of this tumor is discussed.

Key words: Sebaceous epithelioma, External auditory canal

Sebaceous epithelioma (SE), like basal cell epithelioma, sebaceous adenoma and sebaceous adenocarcinoma, is a skin tumor, most of which develop in the scalp²). It is rare for a SE to develop in the skin of the external auditory meatus.

We report a case of SE in the external auditory meatus in which the sebaceous cells were predominant.

CASE PRESENTATION

An 84-year-old Japanese woman noticed a mass in the left external auditory meatus two years before the first medical examination. She visited our clinic because the mass had gradually enlarged and bled on occasion. A tumorous mass 1.5 cm in diameter was observed in the orifice of the external auditory meatus. It had a wide clear base and appeared hemispherical, yellowish-brown, hemorrhagic and elastic yet hard, with a rough, granular, uneven surface (Fig. 1-a,b). There was no tenderness and regional lymphadenopathy. The epithelioma did not adhere to the bone of the external auditory meatus. Fig. 2 shows the CT scan of the tumor filling the external auditory meatus.

After the tumor was resected with the patient under general anesthesia, intermediate layer skin grafting was performed. The patient's clinical course was uncomplicated. There has been no recurrence of the tumor in the two years after the operation.

Histopathological findings: The tumor cells had proliferated forming lobules with a clear demarcation from the deep layers to the superficial in the

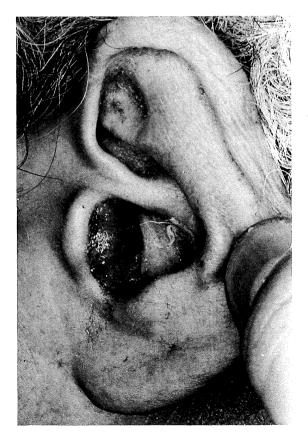


Fig. 1-a. The tumor mass in the orifice of the left external auditory meatus.

corium adjoining the superficial epidermis of the external auditory meatus. The stroma of the tumor had relatively large blood vessels and the cells

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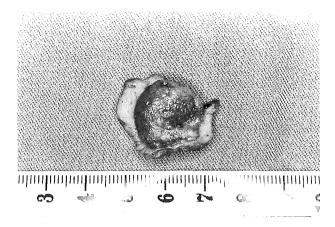


Fig. 1-b. The hemispherical tumor mass with wide clear base.



Fig. 2. CT scan of the tumor (arrow indicates tumor).

showed an indistinct stratified arrangement. The cells adjacent to the stroma were small and either spindle-shaped or columnar (basaloid cells) having oval nuclei with rich chromatin and a palisading arrangement vertical to the basement membrane. The cytoplasm was increased near the center of the tumor, cells being transformed into foamy cells containing numerous small vacuoles in the cytoplasm(Fig. 3). These foamy cells showed morphological characteristics similar to sebaceous cells (Fig. 4). The presence of lipid was confirmed by oil red staining. Keratinizing nests with keratohyalin granules, which were found in squamous cell carcinoma were not found in the tumor. Mitosis were observed one per several fields under the microscoру.

DISCUSSION

Sebaceous epitheliomas occur frequently on the scalp and face where sebaceous glands are numerous, but such a tumor is extremely rare in the external auditory canal. Most SEs grow in the skin and tend to have a yellowish color. They show either pedunculation or a wide base. Some may develop within a sebaceous nevus. According to the

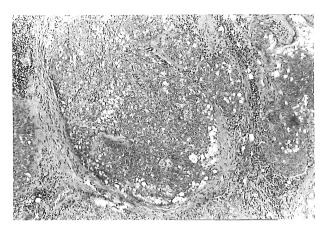


Fig. 3. Section of Sebaceous epithelioma showing the characteristic foamy type cell and the basal cell type with a fibrovascular stroma. $(H.E. \times 50)$

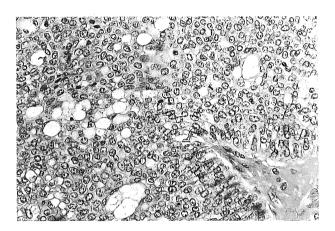


Fig. 4. Foamy cells: nuclei were located in the central part of the cells. (H.E. \times 600)

statistical report of Aso et al¹⁾, the age of patients at the onset of SE ranged from 19 to 85 years, with about 45% being the age of 40 and 50. In many cases, the SE grew slowly; in one previously reported case it was present for 29 years before treatment.

Lever4) stated that SEs show an intermediate differentiation between sebaceous adenoma and basal cell epithelioma. SEs consist of basaloid and transitional cells but may also consist predominantly of basaloid cells. Regarding histogenesis, this epithelioma is believed to arise from germinative cells. On the other hand, Urban and Winkelmann⁶⁾ reported that the sebaceous cells in such tumors did not always originate in the epithelioma and suggested the possibility of differentiation from neoplastic cells into sebaceous glands. Rulon and Helwig⁵⁾ also denied the existence of SEs and stated that they should instead be termed basal cell epitheliomas with sebaceous differentiation. Zackheim⁷⁾ stated that developing basaloid cells are frequently replaced by mature sebaceous gland cells. From the fact that Hori et al³⁾ observed by electron microscopy a more active fatty synthesis in the cells of SEs than in the normally secreting sebaceous gland, it has been suggested recently that these SEs may arise from germinative cells that develop into sebaceous glands.

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