CLINICAL SNAPSHOT

Microscopy of the right ear showing a polypous mass

A Rare Cause of Hearing Impairment

A 54-year-old woman presented with a 3-week history of sinistral hearing impairment and left-sided tinnitus. Ear microscopy showed a polypous tumor in the right auditory meatus and an identical obliterating tumor in the left ear. The patient also complained of back pain and hyperhidrosis.

Histological processing of samples from the left and right auditory meatus pointed to infiltrates of small-cell neuroendocrine carcinoma. FDG-PET whole-body computed tomography (FDG, fluorodeoxyglucose; PET, positron emission tomography) showed a metabolism typical of malignancy at multiple sites throughout the body with no demonstration of a primary lesion. We therefore diagnosed disseminated small-cell neuroendocrine carcinoma with an undetected primary location (CUP, cancer of unknown primary).

Chemotherapy (platinum + etoposide) was swiftly initiated, but the patient died 7 months after diagnosis from liver failure due to progressive metastasization.

This case report illustrates why it is always advisable to carry out histological analysis of unclear tumors of the auditory meatus to rule out malignancy. Besides benign neoplasia and

cholesteatoma, the possible findings include squamous cell carcinoma and basal cell carcinoma. As we found, even an apparently simple impairment of hearing may have a complex cause such as neuroendocrine CUP.

Dr. med. Thea C. Reuter, Prof. Dr. med. Susan Arndt, Dr. med. Till F. Jakob, Klinik für Hals-, Nasen- und Ohrenheilkunde, Universitätsklinikum Freiburg, Medizinische Fakultät, Albert-Ludwigs-Universität Freiburg, thea.charlott.reuter@uniklinik-freiburg.de

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