An epidermoid cyst arising in the occipital lobe

Case illustration

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This 73-year-old man presented with a right lower quadrantanopsia. An unenhanced computerized tomography scan revealed a high-density area in the left occipital lobe. Magnetic resonance (MR) imaging demonstrated a tumor with a heterogeneous slightly hyperintense signal on T1-weighted images and a very low intensity signal on T2-weighted images obtained in the left occipital lobe (Fig. 1 left and center). Gadolinium-enhanced T1-weighted images demonstrated an enhancement of the tumor margin (Fig. 1 right). The patient underwent a left occipital craniotomy. An avascular, extraxial mass was seen displacing the left occipital lobe, and the mass was completely extirpated. The cystic yellow-brown tumor was filled with keratinized debris. The posterior horn of the left lateral ventricle was opened. Microscopic investigation revealed that the wall was composed of stratified squamous epithelium and connective tissue, and the cyst contained keratinized debris and cholesterol clefts (Fig. 2). An epidermoid cyst was diagnosed; the patient’s postoperative course was uneventful.

Intradural epidermoid cysts account for approximately 1% of all intracranial tumors and usually arise as slow-growing extraaxial lesions, which commonly occur in the cerebellopontine angle or the parasellar region. Supratentorial cerebral epidermoid cysts are relatively rare; only 32 occurrences of this type of cyst have been reported since 1960. Eleven of them were found in the frontal lobe, nine in the temporal lobe, six in the corpus callosum, three in the parietal lobe, two in the frontal and parietal lobes, and one in the thalamus. This is the first documented case in which the tumor arose in the occipital lobe.

References


Fig. 1. Axial T1-weighted (left) and T2-weighted MR images (center) demonstrating a space-occupying lesion in the left occipital lobe. Gadolinium-enhanced MR sagittal image (right) revealing enhancement at the tumor margin.

Fig. 2. Photomicrograph showing the cystic lesion covered by the stratified squamous epithelium containing keratinized substance. H & E, original magnification × 90.

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