Ocular Metastasis of Bronchial Typical Carcinoid

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An 86-year-old Caucasian female who was never a smoker was diagnosed with bronchial typical carcinoid and cervical lymph node metastases in December 2008 (Fig. 1). She underwent chemotherapy with octreotide acetate, dacarbazine, carboplatin, and etoposide for 5 cycles. However, the tumor became aggravated and disseminated to the liver, lymph nodes of the upper abdomen, lungs inside, pulmonary hilus, and pleura (Fig. 2A), consecutively. In June 2016, she reported a 1-year history of visual deterioration and diplopia in the right eye. Fundus and ultrasound examination revealed a large subretinal mass involving the optic disc in the right eye (Figs. 2B and 2C). Four months later, she presented with an emergency for redness, pain, and hand motion vision in the right eye with the intraocular pressure of 52 mm Hg (normal range, 11 to 21 mm Hg). Her right eyeball was enucleated. Histopathologic and immunohistochemical findings were consistent with choroidal metastases from a bronchial typical carcinoid with stage IV (M1c) (Fig. 3). She was still alive after enucleation.

Choroidal metastasis constitutes the most common intraocular malignant tumor. The most frequent primary sites are lung in males and breast in females. However, there are few published reports of choroidal metastasis from bronchial typical carcinoid given that it is a rare and low-grade lung neuroendocrine neoplasm and ocular screening is not routinely performed. However, an ophthalmologic evaluation is indicated in the presence of ocular symptoms in patients with bronchial carcinoid.

Figure 1. Histopathologic and immunohistochemical findings of the primary bronchial typical carcinoid in 2008. (A) Hematoxylin and eosin section (original magnification ×200). Immunohistochemically, the tumor cells revealed immunoreactivity for CK8 (B, original magnification ×200) and thyroid transcription factor 1 (C, original magnification ×200). Magnified images (original magnification ×400) of the black squared areas were shown in the bottom right corner, respectively.

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Timely diagnosis and treatment might be helpful in preserving the eyeballs and improving the quality of remaining life.

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