Primary malignant melanoma frequently metastasizes to the brain, but purely intraventricular metastasis is rare. A 73-year-old man presented with headaches, nausea, and vomiting 36 years following excision of a cutaneous malignant melanoma from the right shoulder with dissection of a negative axillary node. No other current evidence of metastatic disease was identified.

Magnetic resonance (MR) imaging performed at the time of admission revealed multiple enhancing intraventricular nodules of the lateral, third, and fourth ventricles (Fig. 1). Endoscopic exploration and biopsy of the lateral ventricular lesions, which was performed via a right frontal burr hole, demonstrated brownish gray 4- to 5-mm nodular lesions of the choroid plexus and ependymal surfaces. Histopathological investigation revealed metastatic melanoma according to the tissue’s strong immunoreactivity to HMB-45, the most specific marker for melanoma. Although an extensive metastatic disease workup revealed no second primary source, we presume that this is a case of metastatic melanoma because of the patient’s history of cutaneous melanoma. This patient was subsequently treated with radiotherapy and intravenous chemotherapy (methotrexate and cytosine arabinoside); intrathecal chemotherapy consisting of these agents may also be considered.

In the majority of cases, melanomas involving the central nervous system represent metastatic disease, and the pattern of metastasis is typically intraparenchymal, leptomeningeal, or dural based. Isolated intraventricular melanoma, primary or metastatic, has rarely been reported, and these cases typically represent a primary melanoma arising from the choroid plexus or neurocutaneous melanosis. To date there has been only one other report of intraventricular melanoma not associated with these sites. The present case illustrates the rare occurrence of intraventricular metastatic melanoma appearing nearly four decades after excision of the primary cutaneous source.

References

Fig. 1. Axial (A), sagittal (B), and coronal (C) contrast-enhanced, and sagittal non–contrast-enhanced (D) MR images demonstrating nodular intraventricular enhancing lesions. Note the presence of a residual chronic frontal subdural hematoma, which was treated several months before the current diagnosis.