A 79-year-old diabetic and hypertensive woman with no history of underlying systemic diseases or immunosuppressive therapy presented in our neurology department with complaints of mild cognitive dysfunction that had developed in the past 6 months. Examination showed mild cognitive impairment without other neurologic deficits. The patient was afebrile, and her vital signs were stable. However, signs of periorbital inflammation affecting her right eye were found.

A computed tomography (CT) scan of the patient’s brain revealed a large, isoattenuated right frontal mass with central hypoattenuated areas of necrosis (Figure A). Brain magnetic resonance imaging (MRI) images showed that the mass had a complex appearance and extended to the roof and soft tissues of the orbita (Figure B).

No abnormalities were detected in the laboratory studies. Immunological test results were normal, and the patient’s serum was negative for human immunodeficiency virus (HIV) and tumor markers. A computed tomography scan of her chest, abdomen, and pelvis showed unremarkable results.

A craniotomy and sub-total resection of the mass were performed. Histopathological findings revealed an inflammatory, granulomatous lesion with septate hyphae (Figure C). The cultures from the brain specimen yielded a positive result for Aspergillus sp.

Concerning the probable route of infection, a pulmonary source and hematogenous route were excluded, but a contiguous spread by maxillary sinusitis could not be ruled out.

Postoperatively, the patient was treated by systemic administration of voriconazole (4mg/kg intravenously, twice daily) and caspofungin (50mg intravenously, daily) to which she showed only a minimal response. The disease progressed, and the patient eventually died 2 months after the diagnosis.

REFERENCES