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Abstracts will be considered for both poster and platform presentations

Other

Case Presentation

A 79-year-old male with a history of type II diabetes mellitus, COPD, and hypertension presented with a few-week history of progressive right upper extremity weakness, dysarthria, and balance difficulties along with severe mandibular tooth pain over the preceding months. On exam, his vitals were normal. He had 4/5 strength in the right upper extremity, right hemineglect, right apraxia, left facial droop, dysarthria with expressive aphasia, and increased left upper extremity tone. His dentition was poor. A dental panoramic radiograph showed large periapical lucencies with surrounding severe periodontal disease, consistent with abscesses. Chest imaging was unremarkable. Magnetic resonance imaging with and without contrast of the brain showed enhancing lesions in the left postcentral gyrus, right medial precentral gyrus, and right mid-central, precentral gyrus. He subsequently had a craniotomy with incision and drainage that returned positive for *Blastomyces dermatitidis*. Additionally, he had a full dental extraction due to the dental abscesses noted on imaging. He was started on intravenous liposomal amphotericin B, but did not tolerate it well, so was switched to enteral voriconazole. He tolerated it well with improvement in his neurological symptoms throughout the rest of his hospitalization.

Discussion

Blastomycosis is caused by inhalation exposure to aerosolized *Blastomyces dermatitidis* or *Blastomyces gilchristi* conidia following disruption of wet soil or organic matter. Most patients with blastomycosis are immunocompetent, although immunosuppressed patients, particularly those with impaired cell-mediated immunity are at increased risk for severe and disseminated disease. Other risk factors for infection are related to the likelihood of environmental exposure, including living in or travel to a known endemic region.

Primary infection predominately involves the lungs with the most common extra-pulmonary sites involving the skin, bones, genitourinary tract, and central nervous system (CNS). CNS blastomycosis often presents as intracranial or spinal abscesses, leptomeningitis, or encephalitis typically from hematogenous spread from a primary pulmonary infection. Isolated CNS blastomycosis – as in our case – is rare and can present as stroke-like symptoms. Treatment of CNS blastomycosis is 4-6 weeks of intravenous amphotericin B, followed by at least 12 months of oral azole therapy.

Conclusions

Infectious processes of the CNS can present with stroke-like symptoms. Blastomycosis, most commonly affects the lung and can rarely present as isolated CNS abscesses. Risk factors include environmental exposure and immunosuppression, but most patients are immunocompetent. Treatment includes intravenous amphotericin B for 4-6 weeks, followed by at least 12 months of an oral azole.