

EBV+ CNS Diffuse Large B-Cell Lymphoma in the Setting of AIDS

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Introduction:

Diffuse Large B-Cell Lymphoma (DLBCL) is a spectrum of B-cell lymphomas that have a variety of clinical presentations. They have effective immunochemotherapy treatments that allow for successful outcomes even in advanced stages. DLBCL of the CNS includes involvement of the brain, eyes, or spinal cord and tends to be more difficult to treat. In immunodeficient patients, this malignancy is strongly associated with the Epstein-Barr virus.

Case Presentation:

A 24-year-old male with a PHx of HIV/AIDS (CD4 2, VL 642k) presented to the emergency room due to progressive altered mental status noted by his mother over the last three weeks, associated with night sweats and weight loss. Of note, the patient had a positive HIV test in 2021 that was never followed up on, and therefore, he was not started on treatment. Initial head imaging showed multifocal cerebral ring-enhancing lesions with cerebral edema and midline shift. Brain biopsy pathology was consistent with CNS diffuse large B-cell lymphoma that was EBV positive. His hospitalization was complicated by an uncal herniation requiring emergent decompressive hemicraniectomy. He was eventually started on high-dose methotrexate and rituximab. He continued to show complications, including neutropenic fever and septic shock, as well as disseminated MAC. Unfortunately, given his complicated hospital course, a family discussion resulted in a decision to proceed with hospice care.

Conclusion:

In this case, the patient unfortunately did not receive the results of his HIV diagnosis, resulting in several years to allow for his HIV to progress to AIDS. The patient developed a primary CNS DLBCL that was not found until he started to have neurologic effects. Despite the initiation of chemotherapy, the neurologic complications on top of complications from AIDS resulted in a poor prognosis for this patient.