Amebic Encephalitis (Balamuthia mandrillaris)





Merlin disease code: 13625 Amebic Encephalitis (Balamuthia mandrillaris)

Paper case report form required

No merlin extended data

Clinical criteria for case classification

An infection presenting as meningoencephalitis or encephalitis, disseminated disease (affecting multiple organ systems), or cutaneous disease. Granulomatous amebic encephalitis (GAE) can include general symptoms and signs of encephalitis such as early personality and behavioral changes, depressed mental status, fever, photophobia, seizures, nonspecific cranial nerve dysfunction, and visual loss. Painless skin lesions appearing as plaques a few millimeters thick and one to several centimeters wide have been observed in some patients, especially patients outside the U.S., preceding the onset of neurologic symptoms by 1 month to approximately 2 years.

Laboratory criteria for case classification

Confirmatory:

Detection of *B. mandrillaris* antigen or nucleic acid or nucleic acid (e.g., PCR, immunohistochemistry) from a clinical specimen (e.g., tissue).

Supportive:

Culture of *B. mandrillaris* from a clinical specimen (e.g., tissue).

Epidemiological criteria for case classification

Not applicable.

Case classification

Confirmed:

A clinically compatible illness in a person with confirmatory laboratory criteria.

Suspect:

A clinically compatible illness in a person with supportive laboratory criteria.

Criteria to distinguish a new case from previous reports

Not applicable.

Comments

B. mandrillaris and Acanthamoeba species can cause clinically similar illnesses and might be difficult to differentiate using commonly available laboratory procedures. Definitive diagnosis by a reference laboratory is required. A negative test on CSF does not rule out *B. mandrillaris* infection because the organism is not commonly present in the CSF. Once the disease progresses to neurologic infection, it is generally fatal within weeks or months; however, a few patients have survived this infection. Patients presenting with the above clinical criteria who have received a solid organ transplant should be further investigated to determine if the infection was transmitted through the transplanted organ. An investigation of the donor should be initiated through notification of the organ procurement organization and transplant center.