Clinical criteria for case classification

An infection presenting as meningoencephalitis or encephalitis, disseminated disease (affecting multiple organ systems), or cutaneous disease. *Acanthamoeba* species GAE presents similarly to *B. mandrillaris* GAE with early personality and behavioral changes, depressed mental status, fever, photophobia, seizures, nonspecific cranial nerve dysfunction, and visual loss. Skin lesions and sinus disease may also be seen.

Laboratory criteria for case classification

**Confirmatory:**
Detection of *Acanthamoeba* species antigen or nucleic acid (e.g., PCR, immunohistochemistry) from a clinical specimen (e.g., tissue).

**Supportive:**
Culture of *Acanthamoeba* species 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

*Acanthamoeba* species and *B. mandrillaris* can cause clinically similar illnesses and might be difficult to differentiate using commonly available laboratory procedures. Definitive diagnosis by a reference laboratory might be required. Several species of *Acanthamoeba* are associated with infection (i.e., *A. castellanii*, *A. culbertsoni*, *A. hatchetti*, *A. healyi*, *A. polyphaga*, *A. rhytides*, *A. astonyxis*, *A. lenticulata*, and *A. divionensis*). A negative test on CSF does not rule out *Acanthamoeba* species infection because the organism is not commonly present in the CSF.