



Merlin disease code: 13629 Amebic encephalitis (*N. fowleri*)

Paper case report form required No Merlin extended data

Clinical criteria for case classification

An infection presenting as meningoencephalitis or encephalitis. The clinical presentation of PAM is like that of acute meningitis caused by other pathogens and symptoms include headache, nausea, vomiting, anorexia, fever, lethargy, and stiff neck. Disorientation, mental status changes, seizure activity, loss of consciousness, and ataxia may occur within hours of initial presentation.

Laboratory criteria for case classification

Confirmatory:

Detection of *N. fowleri* antigen or nucleic acid from a clinical specimen (e.g., direct fluorescent antibody, polymerase chain reaction, immunohistochemistry).

Presumptive:

Either of the following:

- Visualization of motile amebae in a wet mount of cerebrospinal fluid (CSF)
- **Or** culture of *N. fowleri* from a clinical specimen.

Epidemiological criteria for case classification

Not applicable.

Case classification

<u>Confirmed:</u> A clinically compatible illness in a person with confirmatory laboratory criteria.

Probable:

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

Criteria to distinguish a new case from previous reports

Not applicable.

Comments

N. fowleri might cause clinically similar illness to bacterial meningitis, particularly in its early stages. Definitive diagnosis by a reference laboratory is required. Unlike *Balamuthia mandrillaris* and *Acanthamoeba* species, *N. fowleri* is commonly found in the CSF of patients with PAM. After the onset of symptoms, the disease progresses rapidly and usually results in death within 3 to 7 days.

Amebic Encephalitis (*Naegleria fowleri*) (Continued)

Patients presenting with the above clinical criteria and found to have a history of recreational freshwater exposure in the two weeks prior to presentation or are known to have performed nasal irrigation (e.g., use of a neti pot for treatment of sinus conditions or practice ritual ablution including nasal rinsing) in the absence of another explanation for their condition should be investigated further. Urgent confirmatory testing and treatment should be initiated.