Primary Amebic Meningoencephalitis

By
Julie Dreadin
PAM Description

- **Infectious Agent:** *Naegleria fowleri* (ameba)
- **Disease of the CNS**
- **Introduced through nasal cavity → olfactory nerve → brain**
- **Symptoms:** HA, fever, N/V, nuchal rigidity, malaise, seizures, coma
- **Diagnosis:** CSF with motile trophozoites
- **Treatment:** Amphotericin B
Importance of PAM

Epidemiologic Measures
- Incidence: 6 reported cases in 2007 (121 total since 1937)
- Southern tier states
- June-August
- Males ages 10-22
- Recent recreational water activities
- Prevalence: unknown
- Estimated risk → 1 in 100 million exposures

Significance
- USUALLY FATAL
- *N. fowleri* - lakes, pools
- Exposure is common
- ?? Concentration that poses a human risk
- Risk for infection still present
- Health professional & public education
• Symptoms similar to bacterial and viral meningitis
• Death typically occurs in 3-7 days
• Immediate diagnosis and treatment is mandatory for potential survival
• Risk reduction is the key
• Epidemiologic evaluation is difficult → low incidence/??exposures

References