

# Central nervous system infections rare but devastating following heart transplantation

**Central nervous system infections develop infrequently following heart transplants but are a significant predictor of death, according to an article posted online today that will appear in the December 2007 print issue of *Archives of Neurology*.**

In the past 10 years, approximately 24,000 Americans have undergone heart transplantation, according to background information in the article. Improvements in surgical techniques and immunosuppressive medications have resulted in increased survival rates for transplant recipients.

Diederik van de Beek, M.D., Ph.D., and colleagues at the Mayo Clinic College of Medicine, Rochester, studied 315 consecutive patients who underwent heart transplants there from January 1988 through June 2006. Data were gathered from the clinic databases, electronic and paper medical records, laboratory records and cranial imaging tests.

Eight patients (3 percent) developed central nervous system infections, all within four years after transplantation. The most common symptoms were confusion or headache (88 percent), often without the classic signs of fever and neck stiffness. Three of the eight patients died (38 percent), and two (25 percent) survived with mild complications.

Three patients developed cryptococcal meningitis, two had progressive multifocal leukoencephalopathy, two had varicella-zoster virus encephalitis, and one had *Aspergillus fumigatus* infection. "Varicella-zoster virus encephalitis has not been previously reported in heart transplant recipients, to our knowledge, but has been described in patients after bone marrow transplantation or in patients with HIV infection," the authors write. "Whether varicella-zoster virus encephalitis is emerging in other transplant populations should be a subject of further research."

Source: JAMA and Archives Journals

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