
Movement After Brain Death

While disturbing to family members and health care professionals, spontaneous movement in patients diagnosed with brain death may be more common than previously realized.

In the January 11 issue of *Neurology*, researchers from Argentina and Spain reported on movement in patients who showed no brain activity on electroencephalogram tests. The Argentinean study included 38 patients diagnosed with brain death during an 18-month period. Fifteen, or 39%, had motor movements such as bending of toes or jerking of fingers. In all cases, movement occurred in the first 24 hours after the diagnosis; no movements were seen after 72 hours.

The study from Spain described movements in a 30-year-old woman and an 11-month-old child. Both extended their arms, flexed their wrists, and curled up their fingers each time a mechanical ventilator inflated their lungs. José Bueri, MD, of J. M. Ramos Mejia Hospital in Buenos Aires, said the movements are spinal reflexes. "Family members and others need to understand that these movements originate in the spinal cord, not in the brain, and their presence does not mean that there is brain activity," Bueri said. Improved understanding of how these movements occur has important implications for organ procurement for transplantation, he noted.