When does a human being die?

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To the Editor:

We read with interest the review 'When does a human being die?'¹ Opinions vary on this topic. According to Gary Gronseth, M.D., professor and vice chair of neurology at the University of Kansas Medical Center, 'brain death is as valid a definition of death, as if your heart had stopped beating. If you’re brain dead, you’re dead'.² Brainstem death results in no brain stem activity and causes permanent loss in consciousness and the capacity to breathe.

Catastrophic brain injury refers to acute severe brain injury, with intracranial bleeding or cerebral contusions that may lead to death. In boxing, about 10 deaths per year have occurred during the twentieth century; most related to knockout or technical knockout. The most common cause of death is subdural hematoma.³

During infectious diseases fellowship, one of us consulted a 25-year-old African American boxer who had catastrophic brain injury and a fever (40°C). Knocked out in an amateur boxing match, this patient went back to his training room and collapsed. On admission, he was comatose (Glasgow Coma Score = 3). For all intents and purposes, this patient was brain dead when he came to the hospital or even in the locker room. Yet, by using an organismic, denouement definition of death, as Schofield et al. propose, this subject would still be considered alive. The search for the source of fever was futile, since this patient’s brain thermoregulatory center was scrambled beyond repair.

References