## CORRESPONDENCE

pretation of clinical observations that may be compatible with brain death (but suggest otherwise) and critical evaluation of the apnea test procedure. These topics can be found in a practice parameter developed by the American Academy of Neurology and approved by its executive board.<sup>3,4</sup> Many hospitals in and outside of the United States have adopted this parameter in its present form, or in a slightly modified form. These parameters are used by neurologists as the guidelines for declaration of brain death.

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## Can Brain Death Testing Be Perfect?

To the Editor:—I appreciated the excellent review of brain death by Van Norman.¹ However, I must take issue with the implication that well-conducted testing will always correctly indicate whether a patient is dead or alive. As with all complex algorithms, any test sequence for the diagnosis of irreversible brain death may have hidden pitfalls, just as all software of any significant complexity will manifest occasional "bugs." If we accept the notion that, as with all medical tests, testing for brain death has an associated sensitivity and specificity, we must also accept the notion that type I and type II testing errors will inevitably occur. This view is also supported by occasional reports of clinical conditions mimicking brain death.²,³ Finally, if one accepts the notion that still-living but impaired brain stem nuclei may sometimes recover to a degree, it is possible that some nuclei will wax and wane in function during the test period.

I am curious about what should be done with patients with zero prognosis for survival, but who still do not meet all brain death criteria because some small patch of neurons continues to survive. In most of these cases there is no hope of survival, life support is withdrawn, and somatic death follows promptly. I would suggest, however, that some persons—including myself—would be willing to allow organ retrieval to be performed in such a setting (*i.e.*, a setting of "near-complete" brain death) rather than have the organs go to waste. But if I were to

construct my living will to allow organ harvesting in this situation, would it be honored?

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