Inconsistencies in the ethical declaration of death

To the Editor:

We read with considerable interest the recent review by Doig and Burgess concerning brain death.¹ The authors do an excellent job demonstrating that existing criteria for brain death remain problematic, and suggest that a concerted effort be made to address identified inconsistencies.

However, one important clinical situation that appears to be rather ignored in this discussion (despite being clinically common) concerns the patient with a massive brain injury who meets the criteria for brain death only imperfectly, perhaps because one small patch of neurons in a brain-stem nucleus is still operating intermittently. In real-world clinical practice such patients have zero chance of survival and as a result difficult issues must be faced. We call this the problem of incomplete (or near-complete) brain death.²

One approach is to continue to intervene medically, using all available resources, hoping against hope that some miraculous recovery might occur. This approach suffers from a number of drawbacks. First, in the real clinical world miraculous recoveries simply do not occur following massive structural brain damage involving the entire brain stem. Secondly, in a setting of limited resources this approach is very wasteful; these patients end up receiving very expensive and complex care that serves them or their loved ones little or no benefit. A third drawback of this approach is that it merely prolongs the patient's death. In essence, medical interventions in this setting are futile with respect to patient recovery.

As a consequence, once the hopelessness of the situation is established, in the actual clinical world such patients are usually withdrawn from life support, and cardiorespiratory arrest follows inevitably some time later. Tragically, in this setting the organs can almost never be used for transplantation, as they must usually be harvested prior to collapse of the circulation. Thus the organs "go to waste" even when the patient has signed his or her organ donor card and even when the family is enthusiastically in favour of organ donation.

We suggest that there is a need for new approaches to handling the problem of near-complete brain death.

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References

- 1 Doig CJ, Burgess E. Brain death: resolving inconsistencies in the ethical declaration of death. *Can J Anesth* 2003; 50: 725–31.
- 2 Doyle DJ. Debating the criteria for brain death. *CMAJ* 2001; 165: 269.

REPLY:

We appreciate the comments of Drs. Doyle and Robichaud. We agree that there are many patients who suffer massive brain injury and who do not meet neurologic criteria (either clinical or radiographic) to establish death. Under current clinical and professional norms, and as understood by the general public, these individuals cannot become solid organ 'heart beating' donors. The ethical norm that guides a gift of donation is 'the dead-donor' rule: that organs and tissues are retrieved from individuals only after death.

Individuals who suffer massive brain injuries that die determined by cardiac and not neurologic criteria can give a gift of donation. A donation of tissue such as skin, heart valves, corneas etc. also provides life-enhancing benefit to recipients. A gift of tissue donation is as important as a gift of organ donation; the altruism by the family is the same in both circumstances. It may be that organs should also be retrieved from individuals that die from cardiac criteria (non-heart beating organ donation), but at best this may only modestly increase the supply of 'life-enhancing' organs such as kidneys, and less so increase 'life-saving' organs such as livers. It will not increase the supply of 'life-saving' organs such as hearts or lungs.

Whether the 'dead-donor' rule should be abandoned in favour of less restrictive criteria for donation is a topic beyond the scope of our review.¹

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Reference

- 1 Doig CJ, Burgess E. Brain death: resolving inconsistencies in the ethical declaration of death. *Can J Anesth* 2003; 50: 725–31.