Controversies in the determination of death

Letter 1

Editor—Gardiner and colleagues\(^1\) say that there is growing medical consensus about the concept of human death, but there is substantial evidence to the contrary\(^2\) and even frank admission that the redefinitions of death invented for organ transplant purposes are no more than legal fictions.\(^3\)

Smith\(^4\) recognizes the long-term untenability of the UK ‘brain stem death’ basis for death certification which was branded ‘conceptually suspect’ and ‘clinically dangerous’ by the US President’s Bioethics Council.\(^2\)

The article by Manara and colleagues\(^5\) on organ procurement after circulatory death was presumably written before the call by Joffe and 10 others\(^6\) for a moratorium on those procedures, while the ethical problems associated with them are openly addressed. Vincent and Logan\(^7\) note the common lack of knowledge and understanding of ‘brain death’ among donor and non-donor families but fail to consider the relevance of this observation to the validity of consent obtained by registration as potential organ donors without full awareness of the state—very different from death as commonly understood—in which they will be if and when their organs are removed. They must surely be made aware that, despite drug-induced paralysis, beating-heart donors display cardiovascular responses to the surgical trauma such as are commonly seen during everyday therapeutic surgery.\(^8\) Without a clear understanding of that relevant fact, potential donors are denied opportunity to specify general anaesthesia which, although called for by the chief protagonist of the notion that ‘brain stem death’ is death,\(^9\) is, we understand, not always administered.

Declaration of interest

None declared.

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4 Smith M. Brain death: time for an international consensus. Br J Anaesth 2012; 108 (Suppl. 1): i6–9

Letter 2

Editor—The correspondence section is probably not an adequate venue for a complete discussion of the issues raised by Drs Hill and Evans regarding the article by Gardiner and colleagues.\(^1\) However, lest misconceptions persist, some of their points should be addressed. Patients who fulfil criteria for brain death actually have not been shown to have brain-mediated responses to pain. As they note, while there were reports of arterial pressure changes with skin incisions, later reports indicate that these are sympathetic changes, and not pain responses.\(^2\) Without a clear understanding of that relevant fact, potential donors are denied opportunity to specify general anaesthesia which, although called for by the chief protagonist of the notion that ‘brain stem death’ is death,\(^9\) is, we understand, not always administered.

How exactly to define life and, in its absence, death is a complex issue. What is first required is a concept of human life, and there is no consensus as to what that is. If human life is identified with the presence of certain brain functions, then brain death is presently contemplated as death. If human life is identified with any brain function, then present criteria are inadequate and need to be supplemented by EEG, pituitary, and other testing. If human life is identified as any neurone functioning, then Drs Hill and Evans need to take into account that live brain cells can be found more than 8 h after circulation has ceased in a normothermic person.\(^4\) If human life is the same as having circulation in a human body, then Drs Hill and Evans have to identify which exact part of the body needs to have that circulation—could it be just a kidney? And, they have to explain why a corpse attached to a cardiac pump is not alive. If human life is, as some have claimed, the presence of ‘integrated function’, a precise definition of that is required so it can be applied. In addition, the following problem would arise: If an organ recipient received a heart, lung, kidney, and liver from a donor, and all those organs are fulfilling the criteria of ‘integrated function’, since the organs are all from the donor, why is the donor not considered still alive?

\(^4\) Pallis C, Harley DH. Organ donors should receive anaesthesia in exactly the same way as a sentient patient. ABC of Brainstem Death, 2nd Edn. London: BMJ Publishing Group, 1996; 46

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