The ethics of elective ventilation

or some, it comes down to a matter of consent. For others, it's standard practice or at the very least, one that needs to be more widely adopted to expand the tiny pool of organs now available for transplantation. And for still others, it's a matter of weighing what's in a patient's best interest.

Such are the thorny ethical issues surrounding the notion of elective ventilation, the practice of placing comatose patients who are near death on mechanical ventilation until they're brain-dead and their organs can be recovered.

The risk, albeit small, is that the patient might not progress to brainstem death as expected, potentially leaving him in a persistent vegetative state — wherein he is able to breathe on his own but has no evidence of higher-brain activity — or a similar condition.

Much of the debate surrounding the ethics of elective ventilation stems from "confusion over what is considered to be in the best interest of the patient," says Eike-Henner Kluge, professor of philosophy and biomedical ethics at the University of Victoria in British Columbia.

Implicitly, elective ventilation is used at a time when the procedure would not contribute to the patient's biological well-being or, in most cases, affect his fate. Physicians may decide that nothing more can be done for a patient who has suffered a devastating brain injury, but rather than allow the heart to stop and the patient to die, artificial ventilation is used to keep the heart beating and the blood flowing. The patient is kept in this state of limbo until brain death occurs.

The practice was outlawed in the United Kingdom in 1994 as being inimical to the clinical interests of patients, but the British Medical Association has called for a debate on this issue in the face of a chronic shortage in the availability of organs for transplantation (www.cmaj.ca/lookup/doi/10.1503/cmaj.109-4259).

But it is fallacious to characterize a



The notion that patients might be kept around until they die so that their organs can be harvested is anathema to some critics.

patient's best interest as solely encompassing procedures that are believed to be medically advantageous, Kluge argues. Best interest must be defined not just in medical terms, but "in medical terms relative to the values of the patient." Elective ventilation for the purpose of organ donation, then, would be in the best interest of a patient who has expressed a desire to be a donor, whether through direct consent or relayed by next of kin postmortem, he says.

The notion of elective ventilation doesn't appear to be ethically abhorrent in all nations. In the United States, for example, if a patient has expressed a desire to be an organ donor and subsequently suffered a critical brain injury and there is family consent, continuing mechanical ventilation would be allowed until brain death. It's called "following a patient's wishes," rather than elective ventilation, Dr. Richard Freeman Jr., chair of the Department of Surgery in the Geisel School of Medicine at the Dartmouth-Hitchcock Medical Center in Lebanon, New Hampshire, writes in an email. "I would

argue that this practice is precisely in the patient's interest because he or she said it was in registering their interest to be an organ donor."

By and large, consent to elective ventilation can be inferred from a person having previously consented to organ donation, Kluge contends. In agreeing to donate, a person expresses a desire to donate useable, rather than useless, organs, he says, adding that doing so may require elective ventilation.

While it would be "ethically ideal" to include specific consent to elective ventilation, that's really unnecessary, he adds. "It's like saying 'I agree to have my organ donated but I won't agree to have my kidney put into a container with ice to be transferred from one location to the other'. That's nonsense."

But others argue such specific consent should be included in any organ donation consent process because elective ventilation isn't an entirely risk-free procedure, as patients may linger in a persistent vegetative state.

That risk must be communicated to those giving consent, says Dr. Grant

Gillett, a medical ethics professor at the Bioethics Centre in the Division of Health Sciences at the University of Otago in Dunedin, New Zealand. "You have to in some way make it clear that the significant other possibility ... has been excluded or will be dealt with in an adequate way."

The risk of the patient's continuing survival in a debilitated state makes the issue of elective ventilation ethically problematic, Gillett adds. "The main problem is when you're in a context where there is no way of escaping from that situation."

The question of whether elective ventilation is ethical is thus contextual, he argues. "A lot depends on the certainty with which you can proceed and whether there is an escape mechanism available in your local jurisdiction if the patient should be left in a neardeath state so that you're not then going to feel compelled to keep the patient alive. You kind of recognize that it's not something they would have welcomed."

Aside from the ethical and legal barriers, there's also the concern that the public might subsequently question the motives of health facilities, in that intensive care units might be perceived to be working to benefit the donation system rather than the patient.

More research is needed to determine if elective ventilation might deter some from donating organs, Gillett adds. "We don't want our IC [intensive care] units ever to be seen as kind of like collections of vultures, but this is a real problem and it is a real tragedy that sometimes people only find out about the possibility of organ donation when it's much, much too late." — Michael Monette, *CMAJ*

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Editor's note: Last of a three-part series.

Part 1: **British docs urge elective ventilation** (www.cmaj.ca/lookup/doi/10.1503/cmaj.109-4259).

Part 2: **The ever-muddled Canadian waters and elective ventilation** (www.cmaj.ca/lookup/doi/10.1503/cmaj.109-4260).