Routine recovery: an ethical plan for greatly increasing the supply of transplantable organs

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Purpose of review

All current organ procurement policies require some form of consent. Many families refuse to permit organ recovery from a recently deceased relative; therefore, the major cost of requiring consent is the loss of some lives that could have been saved through transplantation. Here, we argue for a much more efficient approach to organ procurement from brain dead individuals – routine recovery of all transplantable organs without consent.

Recent findings

Careful analysis of the relevant literature shows that, compared with its competitors, routine recovery has the greatest potential to increase cadaveric organ procurement and save lives while causing very little harm. Furthermore, a recent survey suggests that 30% of the US public would already accept routine recovery even though the respondents were not educated regarding the value of this approach.

Summary

Patients on the transplant waiting list are dying while organs that could have saved them are being buried or burned because of family refusal to allow posthumous organ procurement. Routine recovery would eliminate this tragic loss of life-saving organs without violating ethical principles. Indeed, we argue that of all the proposals designed to increase the supply of transplantable cadaveric organs, routine recovery is the best.

Keywords

consent, organ procurement, organ shortage, routine recovery

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Introduction

The major barrier limiting clinical transplantation today is a severe shortage of suitable organs. In the USA, 3700 new names are added to the transplant waiting list each month, and every day about 18 listed people die before a suitable organ can be found [1]. Compounding this tragedy is the fact that more than 40% of potential organ donors do not become actual donors [2]. As a result, many cadaveric organs that could have saved lives through transplantation are instead buried or burned. What is wrong with our current organ procurement system and what can we do to improve it?

What is wrong with our cadaveric organ procurement system?

Currently, the USA follows an opting-in policy for organ procurement. This approach requires consent from the family (or the individual premortem) before cadaveric organs can be removed for transplantation. Herein lies the system's Achilles' heel. The single greatest factor limiting conversion of potential donors into actual donors is refusal to consent [3]; at least one-third of families asked for permission to recover organs from a recently deceased relative say no. The organs so lost are potentially life-saving, and, therefore, the current cost of requiring consent for procurement is the loss of some patients' lives.

In an attempt to bolster consent rates, and thus reduce the death rate among patients on the waiting list, great efforts have been invested in increasing public commitment to posthumous organ donation. Notable are those of the US Department of Health and Human Services sponsored Organ Donation Breakthrough Collaborative [4]. Although these efforts appear to have increased consent and procurement rates, many families still refuse to allow recovery and, partly as a result of this, the number of patients awaiting solid organ transplantation and dying on the list continues to grow.

Several plans designed to mitigate the consent barrier have been proposed, including financial incentives [5], granting preferred status to those who commit to posthumous organ recovery [6], and changing to an opting-out approach [7,8]. The ethics of these alternatives have been

debated extensively and all remain controversial. Furthermore, all of them require some form of consent, and it is therefore unlikely that any of them would yield a near 100% conversion rate of eligible to actual donors that patients on the waiting list so desperately need.

There is another procurement plan that could accomplish this lofty goal but is rarely mentioned in discussions of the organ shortage – routine recovery of all needed cadaveric organs without consent [9–16,17•]. Although this possibility is often met with negative responses, careful consideration reveals that it would be ethically acceptable, less costly than its competitors, and almost certainly much more efficient. Below we argue strongly for this plan, but before doing so we wish to emphasize that our proposal for routine organ procurement is limited to cases of brain death [18]. This stipulation is designed to eliminate concerns about end-of-life care and conflicts of interest for physicians that might arise if routine recovery were applied to cases in which death is declared on the basis of cardiopulmonary criteria after withdrawal of life support [19].

Advantages of routine recovery of cadaveric organs

The major advantage of routine recovery is that under this plan the efficiency of organ procurement from brain dead individuals would approach 100%. As a result, more lives would be rescued. No longer would a patient awaiting transplantation be allowed to die while an organ that could save him or her is discarded, which currently happens frequently under our opting-in system. Perry [14] argues that the latter outcome is ethically unacceptable: '... to waste, during a period of scarcity, human organs that might otherwise be utilized to save and improve a great many lives [is] immoral.' Although other proposals designed to facilitate organ recovery might reduce this tragic waste, only routine recovery has the potential to eliminate it. Thus, of all the alternatives, routine recovery best adheres to the widely accepted philosophy that when dealing with endangered people who wish to live, saving lives is generally the first priority [9].

Although the expected high efficiency of routine recovery is its major raison d'être, it would also provide several other advantages [16,17•]. Routine recovery would be much simpler and cheaper to implement than proposals designed to stimulate consent because there would be no need for donor registries, no need to train requestors, no need to consider paying for cadaveric organs, no need for stringent governmental regulation, and no need for ongoing public education campaigns. Routine recovery would eliminate the added stress now experienced by some families and staff members who are forced to confront the often emotionally wrenching question of consent for postmortem organ recovery. Delays in the removal of transplantable organs, which sometimes occur while awaiting the family's decision and that can jeopardize organ quality, would also be eliminated. Routine recovery of cadaveric organs would be more equitable than are systems that require consent, because under this plan all people would be potential contributors and all would be potential beneficiaries. No longer could one say 'thank you' when offered an organ but say 'no' when asked to give one; such 'free riders' would be eliminated. Concern about exploitation of the poor, which sometimes arises during discussions of organ sales, is not an issue here. Furthermore, by greatly increasing the availability of transplantable organs, routine recovery would reduce the need for living donors, thereby decreasing the number of people exposed to the risks for living organ donation. Finally, routine recovery might benefit even healthy people who never need a transplant in the same way that the security of having insurance benefits people who never file a claim.

Concerns about routine recovery of cadaveric organs

One of the major objections to routine recovery is the claim that it would violate individual autonomy because it would eliminate the requirement for consent [20•,21,22]. As Jonsen [23] points out, however, '... consent is ethically important because it manifests and protects the moral autonomy of persons... [and] it is a barrier to exploitation and harm. These purposes are no longer relevant to the cadaver, which has no autonomy and cannot be harmed.' Opponents of routine recovery might counter that even if this were true, there is a strong tradition of respecting the premortem wishes of the decedent. As Callahan [24] suggests, however, under certain circumstances we might not always feel compelled to honor such wishes: 'Suppose that someone has willed that on her death her property be liquidated and the proceeds buried with her ... Do we feel so thoroughly bound when what is willed is so shamelessly wasteful? I think we do not ...'.

Another major objection to routine recovery is the allegation that the dead, or at least their 'surviving interests', can be harmed [21,22,25,26]. One commonly suggested example of a surviving interest is a wish for bodily integrity after death, an interest that routine posthumous organ recovery would thwart and, it is claimed, thereby harm the decedent.

We strongly believe that the concept of posthumous harm is a fallacy [24,27]. Although some people may wish it were not so, as Emson and Harris point out, dead bodies decay very quickly and cannot remain intact [10,11]. Desire for bodily integrity, therefore, is bound to be

quickly thwarted by nature. More importantly, after a person dies, the person he or she was ceases to exist, and so cannot be harmed. In agreement with this view, Callahan [24] notes that '... the reason that all arguments for harm and wrong to the dead must fail is that there simply is no subject to suffer the harm or wrong. Thus, there cannot be a good philosophical reason for holding that the dead can genuinely be harmed or wronged ...'. Even people who believe in an afterlife and the possibility of resurrection should accept routine recovery. Removal of organs and tissue for therapeutic purposes from living persons (e.g. the appendix, spleen, colon, etc.) and deaths following massive trauma and burns do not usually generate concern about resurrection, even though the body can no longer be buried intact. Consistent with this observation, Savulescu [28] concludes that 'Any kind of afterlife (if there is one) cannot depend on what is done to the dead body.' Indeed, it seems odd to hold that a person would be denied the possibility of resurrection based on what another had done to his or her body. Also, with regard to concerns about disrespecting the dead, Hester [29•] points out, 'Respect and disrespect are paid to persons/moral agents, not to bodies per se. In the face of the need for healthy organs for living human beings, spiritual concepts that champion a spiritual notion of bodily integrity over helping others survive seem misguided.'

However, even if we are mistaken in our skeptical view of the concept of posthumous harm, we would still strongly support routine recovery of cadaveric organs. As Harris [11] points out, '... rights or interests would have to be extremely powerful to warrant upholding such rights or interests at the cost of the lives of others ... the interests involved after death [be there any] are simply nowhere near strong enough [to maintain the consent requirement for cadaveric organ recovery while potential recipients continue to die]'.

The possibility of offending and thus harming surviving family members is more concerning, but even this possibility is not sufficient to reject routine recovery. Professor Harris [30] again states that 'If we can save or prolong the lives of living people and can only do so at the expense of the sensibilities of others, it seems clear to me that we should. For the alternative involves the equivalent of sacrificing people's lives so that others will simply feel better or not feel so bad, and this seems nothing short of outrageous.' Similarly, Emson [10] concluded that it is 'morally unacceptable for the relatives of the deceased to deny utilisation of the cadaver as a source of transplantable organs. Their only claim upon it is as a temporary memorial of a loved one, inevitably destined to decay or be burned in a very short time. To me, any such claim cannot morally be sustained in the face of ... the overwhelming and pre-emptive need of the potential recipient ... To grant the right and power of consent to an individual who may be affected emotionally [e.g. a relative], is to elevate the possible emotional affect of one person, as more important than the physical life of another. The imbalance of benefit is too great to permit of this.' Also, consider that the occasional necessity of a military draft is widely accepted even though the death of a young soldier would be much more painful for his or her family than would be the drafting of organs from a relative who is already dead. Finally, it should be noted that organ recovery does not eliminate the possibility of an open casket funeral [10].

Another objection to routine recovery of cadaveric organs is that it would violate religious or other moral convictions of 'conscientious objectors'. This point is an important issue. One approach is to conclude that routine removal is so much in society's interest that no one should have a choice regardless of his or her beliefs. Another possibility is to allow conscientious objectors to opt out [9,12,13]. The latter approach would dilute the value of our proposal, and so we favor not allowing exemptions, as is true for forensic autopsies. Consistent with this view, Harris [11] states that it is '... far from clear that people are entitled to conscientiously object to [and block] practices that will save innocent lives ... when the costs to them are insignificant in comparison with the gains to others'. Ultimately, it would be up to the public and policy makers to decide how to handle conscientious objectors, but, however, this issue is resolved it does not justify abandoning the proposal.

Silver [15] discusses possible legal obstacles to routine recovery of cadaveric organs in the USA. These include violating freedom of religion, taking private property without just compensation, and infringing on privacy rights. He concluded that only the first of these might pose a problem for an organ draft. Legally, cadaveric organs are not considered property and so families have no property rights in them. With regard to privacy concerns, Silver [15] wrote that, 'Even if the Court were to conclude that an individual's decision regarding the disposition of her dead body is protected by the right of privacy, it would likely uphold the proposed organ draft on the ground that it promotes a state interest of sufficient importance to warrant an intrusion into constitutionally protected decisionmaking.' On the other hand, it is unclear whether the first amendment to the US Constitution would be violated were exemptions on religious grounds not allowed. With such an allowance, however, and perhaps even without it, there should be no insurmountable constitutional barriers to the plan. Support for this conclusion comes from the 1905 US Supreme Court ruling affirming the constitutionality of the Massachusetts statute requiring mandatory vaccination against smallpox [31]. In that opinion, the Court asserted [31]

that, '... the liberty secured by the Constitution ... does not import an absolute right in each person to be, at all times and in all circumstances, wholly freed from restraint. There are manifold restraints to which every person is necessarily subject for the common good. On any other basis organized society could not exist with safety to its members'.

A final objection is that routine recovery would generate outrage among the public. This is possible. We and others believe, however, that it is likely that given education and time, most of the public would soon recognize the tremendous benefit and fairness of the plan, and, therefore, come to accept it just as they now accept other mandated behaviors designed to promote the public good [30]. Preliminary data suggesting that 30% of the US public would already accept routine removal of cadaveric organs, without education regarding the value of this approach, provide support for this view [32].

Precedents for routine recovery without consent

As noted above, one of the major reasons for insisting upon consent is to show respect for autonomy – a major principle of biomedical ethics. Beauchamp and Childress [33] point out, however, that as important as this principle is, it '... has only prima facie standing and can be overridden by competing moral considerations'. One such consideration occurs when society is so invested in attaining a certain goal designed to promote the public good that it mandates its citizens to behave in a manner (or acquiesce to a policy) that increases the probability of achieving that goal, even if many of them would prefer not to act in this way. Examples of such society-mandated behaviors and policies include a military draft during wartime, vaccination of children entering public schools, taxation, jury duty, forensic autopsy, and, in some US states, routine removal of transplantable corneas from decedents that fall under the authority of the medical examiner [11,12,15,20•,34••,35]. Although some people may not like the fact that they have no choice about these programs, the vast majority accepts them as necessary to promote the common good. Routine removal of cadaveric organs would be consistent with this approach and would save many lives at no more (and in some cases much less) cost than these other established programs. Furthermore, although any attempt to legalize routine recovery would probably meet with considerable resistance, the same prediction might have been made before other society-mandated programs were enacted, programs that are now widely accepted as necessary and beneficial. Moreover, had we been born into a world in which cadaveric organ removal for transplantation were routine, it is likely that few of us would question the policy, just as few people question mandatory forensic autopsy today. Finally, it is important to remember here that, as noted above, decedents have no autonomy.

Another justification for routine removal of cadaveric organs: easy rescue of an endangered person

It has been argued cogently that when one can save an endangered person at little or no risk to oneself, rescue is morally obligatory [29•,36,37]. Given our view that decedents can not be harmed and that their organs may be life-saving, we and others believe that posthumous organ donation is an example of an easy rescue. As such, it is not an act of charity but rather a moral duty [29•,36,37]. Unfortunately, many people do not fulfill this duty. Given this frequent failure, routine recovery of cadaveric organs may also be justified as necessary to ensure that easy rescues of patients with organ failure are effected. If our proposal were enacted, no longer would potential organ recipients be allowed to die simply because of the moral failings of nonconsentors, as now happens frequently.

Conclusion

Some people with end-stage organ disease who could be saved by transplantation are dying needlessly because of our failure to recover all usable cadaveric organs. Organ procurement policies that require consent are at least in part to blame because many families still decline when asked for permission to recover organs from a recently deceased relative. Routine recovery of cadaveric organs would eliminate this tragic waste of precious human resources, would not injure decedents (because they cannot be harmed) or violate their autonomy (because they have none), and would increase the number of lives saved by transplantation. The major cost would be the risk of exacerbating the emotional distress experienced by family members who have recently lost a loved one. We are left then with having to choose between a less efficient plan that protects families' feelings (e.g. opting-in) and a more efficient plan that would save more lives but upset some surviving relatives (i.e. routine recovery). In our view, the balance of risk versus harm here comes down heavily in favor of the latter. In fact, as Emson [10] has argued, it may be immoral to require consent for cadaveric organ procurement because this practice leads to an unnecessary loss of life while the cost of routine recovery would be minimal. Given a choice between not exacerbating emotional distress and saving life, we will choose life every time and we are surprised that any thoughtful people would choose otherwise.

If we can mandate an autopsy in certain settings, and if we can conscript people into the military and place them at the risk of death, then surely we can conscript an organ

from a dead person when the risk to that person is zero and the benefit can be life-saving. As Monaco [38] stated, 'We need a bold, new approach to increase the available [organ] pool.' We submit that routine removal of transplantable cadaveric organs is the answer. In our view, this proposal is not only ethically acceptable, it is actually ethically preferable to its competitors because it has the greatest potential to increase organ procurement and save lives while causing little harm, if any. Unfortunately, this plan is rarely taken seriously in discussions of potential solutions to the critical organ shortage. In our opinion this is a bad mistake. It is time to start talking about routine recovery of cadaveric organs openly. The stakes are too high not to.

References and recommended reading

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Additional references related to this topic can also be found in the Current World Literature section in this issue (p. 226).

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