There are many children whose lives could be saved if only there were enough transplantable organs available. The medical profession has seen an obligation to help these needy children. Techniques for transplantation have been perfected and are continuing to be perfected, but there just are not enough organs to go around. Until recently, organs were donated by parents of children who died either from disease or trauma not affecting the organ in question. Now, a new source of organs has been suggested.

Some infants are born with no skull, no scalp, and no forebrain. The condition is called anencephaly. These infants, when not stillborn, always die. Their breathing can be assisted and they can be given intensive care until they die. Therefore, their organs can be kept in good condition. Why not use these organs to help others? What are the issues involved?

Is it ever right to force action without consent? With adults it is often difficult, especially in some medical cases, to decide when someone is rational. (It is easier to be rational than to be legally competent. A person with paranoia can be rational but still lack competence.) In a way, there is no such problem with infants, whether, anencephalic or not. Infants cannot make decisions for themselves. We normally let parents decide issues for their children. Why not in this case? Why shouldn’t parents be allowed to donate the organs of their anencephalic child to help another infant survive?

In his article on anencephalic infants, Norman Fost argues that a moratorium is needed to think through the problems raised by the facts that anencephalic infants cannot give consent; the potential donors are not dead in any sense that we now recognize; if we let them die in the usual fashion, their organs will be damaged; if we keep them alive artificially so their organs are not damaged, then declare them dead on some special grounds, it certainly looks as if we are killing them for their organs. Fost discusses these four problems, concluding that we are left with ethical questions about the definition of death and about the justification of “nontherapeutic intervention.”

The Ethics and Social Impact Committee, Transplant Policy Center at Ann Arbor, Michigan, defends the view that anencephaly is a special...
condition. The infant has no interests (no baseline to which to return), no quality of life. Therefore, with the parents’ consent, it is morally acceptable to use anencephalic infants as organ donors. Fost has argued against this justification on the grounds that it is too concerned with the benefits to others at the expense of the anencephalic. He also asks, what other special category might be defined into existence in order to help a special group in need? The Committee, in a section of objections and replies, tried to address these questions.

Is it demeaning to see the value of the anencephalic infant only in terms of what its death can do to help others? Here we see a clash between two different approaches to ethics. One view tells us: never treat a person as a means to an end. Such a view, based on appeal to inflexible principles, is called deontological. The other view tells us: it is permissible to treat persons as means, so long as the benefit of doing so outweighs the harms. This view is called utilitarian or consequentialist. When we look at the issue as framed by these two conflicting theories about what is right, we see clearly that we must understand just what goes into the concept of a person. We are also being forced by the utilitarian approach to be very clear on the benefits and the harms.

As you read the following article, keep the following questions in mind: Why can’t parents give consent to let their anencephalic child die? Should the concept of person be extended to anencephalic infants? Are any infants persons? Is there a slippery-slope argument here: First anencephalics, then mildly retarded infants, then . . . until we are all at risk?

Removing organs from infants with anencephaly for the propose of transplantation seems to be such an eminently desirable activity that for many the controversy over it is puzzling. Potentially hundreds of lives of terminally ill children could be saved with hearts, livers, or kidneys. Much of the pressure for such organ donation in fact comes from parents of anencephalic infants, who typically see such transplantations as in their interests. Removal of organs would not seem to violate any interests of the anencephalic infant, whose imminent death is certain and who presumably is incapable of experiencing pain or discomfort. And expanding the availability of organs in this way has long been advocated by physicians at the forefront

of organ transplantation. Who would be opposed to a program that seems to benefit so many and harm no one? Yet controversy persists on a variety of unresolved empirical, legal, and philosophical questions.²

Two preliminary observations about language should be made. First, “donation,” meaning “gift,” suggests a voluntary, freely chosen act.³ Since infants are incapable of donation in this sense, it is more appropriate to refer to them as sources rather than donors, and to the taking of their organs for transplantation as removal or procurement rather than donation. Yet however deformed and handicapped anencephalic infants may be, they are persons under the law and should be treated as such, at least until the present debate is resolved. It is depersonalizing to refer to them by terms such as “anencephalics,” or still worse “sources.” At the cost of a few extra words, it is preferable to refer to such infants as “infants from whom organs might be taken,” or to keep the word “donor” in quotation marks.

What is the Problem?
The central doctrine for most of the history of organ transplantation has been the “dead donor” rule: Nonconsenting patients must be dead before removal of their organs. But anencephalic infants do not generally meet current standards of death. They are typically born with some or all of their brain stem functions intact. The usual mode of death is presumably cardiorespiratory failure under circumstances that make their organs unsuitable for transplantation. Nor do infants with anencephaly meet the traditional criteria used to justify organ donation from living persons, whether competent adults, minors, or mentally retarded persons.⁴ They are incapable of consenting, and they have no present or future interest that is served by saving the life of the recipient, related or not.

Thus, proposals to remove the organs of anencephalic infants in ways that would be ethically and legally acceptable require either changing the present rules—discovering a justification for removing organs that requires neither consent, death, or benefit to the person from whom the organs are removed—or devising a way of removing their organs that does not violate the present rules. The positions most frequently advocated—waiting for traditional (cardiorespiratory) death to occur, maintaining cardiorespiratory support until brain death occurs, redefining brain death as cortical death to allow anencephalic infants to be pronounced dead immediately, or redefining anencephaly as a special category altogether—suffer from various medical, ethical, or conceptual problems. Abandoning the “dead donor” rule itself
would seem to be a more viable alternative. But ultimately, reasons justify actions, and until there is consensus on what reasons suffice for this procedure, as well as clarification of some unanswered medical questions, a moratorium should be imposed on organ removal from these infants.

**WAITING FOR TRADITIONAL DEATH**

Most anencephalic infants die within a few days of birth, though survivors of weeks, months, and even years have been reported or claimed. There is little documentation regarding the cause of death, and it is therefore not known how long such infants might live with vigorous treatment, including ventilatory support. The causes of death probably include aspiration, infection, adrenal insufficiency, and/or poor temperature regulation. The life-ending event is presumably cardiorespiratory arrest, with poor perfusion of vital organs, rendering the heart, liver, and kidneys unsuitable for transplantation. Corneas and skin might be salvaged but there is little demand for these from neonates. In summary, death due to cardiorespiratory failure is incompatible with organ retrieval for reasons that apply to all patients. For medical reasons, it would be necessary for brain death to occur prior to cardiorespiratory collapse if removal of organs from these infants is to proceed under the present guidelines.

**MAINTAINING CARDIORESPIRATORY SUPPORT**

According to a protocol developed by transplant surgeons in Toronto in 1987, and later implemented at the Loma Linda University Medical Center, infants with anencephaly have received vigorous life support, including mechanical ventilation, in anticipation of whole brain death and subsequent organ removal. Assuming that whole brain death is properly diagnosed according to contemporary medical standards, and appropriate parental consent is obtained, such infants would seem, on ethical and legal grounds, to be analogous to any other brain-dead infant. Such patients are legally dead in virtually all states by statute or common law and for decades their organs have been removed without serious controversy.

This approach raises a number of medical and ethical questions, however. First, it is unclear, on theoretical grounds, why an anencephalic infant born with an intact brain stem should become brain dead if oxygenation and perfusion are maintained. The malformation is presumably static, though it is possible that some progression continues after live birth. It is also possible that infection could lead to destruction of the brain stem, though in infants with an open defect, lethal increases in intracranial pressure are unlikely.
Even if brain death were to occur, there are problems in confirming it. There is evidence that the traditional criteria for diagnosing brain death may not be valid for infants in the first seven days of life. A task force concluded that these criteria should be limited to infants over the age of seven days.6

It is, therefore, especially important to be clear about the criteria for diagnosing and documenting death in the babies reported by the Loma Linda group. A central feature of this diagnosis is the clinical assessment of brain stem death. The brain stem controls multiple functions, but the one of ultimate interest to this debate is the respiratory center. When a patient is on a ventilator, a so-called “weaning test” is performed, which consists of discontinuing the ventilator and waiting for carbon dioxide (CO$_2$) to accumulate in the blood until it reaches a point where it would normally stimulate the respiratory center to initiate a breath. To establish that the brain stem is not responding, it is essential to measure the CO$_2$ level in the blood to prove that it reached a level sufficient to stimulate respirations. It is important to maintain blood oxygen at normal levels during this test for several reasons. This maintains the viability of the organs intended for transplantation. In addition, low oxygen levels can adversely affect respiratory function and create the false impression that the brain stem is dead. Finally, inadequate oxygen levels can cause the death of the brain stem.

Regrettably, the cases from Loma Linda have not been reported in scientific, peer-reviewed journals where such data are required. The lay press either has not inquired about or has not published the laboratory values that would establish whether the weaning test was appropriately carried out and brain stem death properly documented. Consequently, there is theoretical and empiric uncertainty about why and whether the anencephalic infants reported to have died on this regimen actually did die.

Even if these difficulties could be surmounted, there is an ethical problem in keeping such infants alive solely to serve the interests of others. Keeping brain-dead patients on ventilator support for transplantation purposes is not analogous and does not violate the Kantian objection to using a person solely as a means to an end since they are not considered to be “alive” during the period of ventilatory support.

It could be argued that this breach of duty—if it is that—is not new or shocking. In the early days of transplantation, organs were regularly removed from brain-dead patients who had not yet been considered legally dead. We may say that our new understanding of death informs us that those patients were in fact dead even if the transplant surgeons then didn’t know it.
But the fact remains that there was broad social acceptance of removing organs from patients who were thought to be alive. Consensus does not justify actions, but it could not be claimed that using anencephalic infants in such a way constitutes crossing a boundary for the first time.

Using children solely as a means toward the ends of helping other children does occur in other settings. Federal research regulations allow nontherapeutic research to be carried out on nonconsenting children under certain conditions, over the objection of some. Certain immunization campaigns, such as vaccination of preschool males against rubella, have also been accepted with the understanding that they did not serve the interests of such children. Whether or not these programs and policies can be justified—and I think they cannot—is beyond the scope of this paper. Suffice to say that these examples involve children who clearly do have interests, and might therefore be more objectionable than organ removal from anencephalic infants.

In summary, the Loma Linda approach leaves unresolved theoretical and empirical questions about the occurrence of brain death in ventilated anencephalic infants, as well as raising concerns about administering intensive care to a living patient for the sole benefit of others.

**Redefining Brain Death as Cortical Death**

Because of these difficulties, some have suggested that the accepted definition of death as requiring death of the whole brain should be reconsidered. Such proposals derive from several different lines of thought.

First, there is the frankly utilitarian proposal that brain death and/or death itself should be defined in whatever way maximizes the greater good. This proposal should not appear novel to careful readers of the famous Harvard Committee Report on the definition of death. The committee was explicit as to its utilitarian motive: “Our primary purpose,” they began, “is to define irreversible coma as a new criterion for death,” because, they went on to say, “obsolete criteria for the definition of death can lead to controversy in obtaining organs for transplantation” (emphasis added). If resolution of a controversy that stands in the way of procuring organs for transplantation was a valid reason for redefining death in 1968, why would it not be a sufficient reason for another redefinition in 1988?

The problems with utilitarian justifications for redefining death are both obvious and subtle. The obvious problem is that they invite constant redefinition whenever utility requires it, creating not only instability but the per-
ception and the possibility that unwanted persons can be defined out of existence if it serves the greater good. A deeper objection is that the definition of death is not whatever we want it to be, but exists independently of our purposes. Indeed, several scholars believe they have discovered this true definition of death; unfortunately, their views are not entirely compatible with each other.9

Nor do all scholars agree that there was a need for a redefinition.10 Alexander M. Capron has argued that diagnosis of brain death does not establish a new definition of death, but merely provides “an accurate alternative way to establish the same physiologic state of death as the heart and lung measurements that are done on persons not on artificial life supports.”11 This view is problematic because it does not make clear what this underlying physiologic state is. Brain-dead patients maintained in intensive care units respire, bleed, digest, filter wastes, and could even reproduce—the biologist’s *sine qua non* of life. These are all the kinds of functions that heart-lung criteria of death classified as signs of life, which is why transplant surgeons and others proposed adding brain death to the definition of death.

Regardless of whether one believes that there is a “true” definition of death, or takes the nominalist position that definitions are not discoverable but are human conventions, some would claim that death of the person should be equated with irreversible loss of cortical function, not loss of function of the whole brain. Michael Green and Daniel Wikler defend this position on the fundamental philosophical ground that the continued identity of the person depends on the presence of cortical function.12 Whatever the merit of these arguments, they raise implications for other patients besides anencephalic infants. The much larger group of patients in a persistent vegetative state, for example, might also become eligible for organ removal if loss of cortical function became a sufficient criterion for establishing legal death of the person.

It is not inevitable that this extension would occur, of course. A statute could be drafted, for example, requiring the *complete* absence of any signs of cortical function as a condition for diagnosing death. Since patients in persistent vegetative state commonly show some signs of cortical function, such as sleep-wake cycles and electroencephalographic activity, they would not be dead under such a requirement. Capron’s claim that the permanently comatose are identical to anencephalics “on the relevant criteria” begs the question of which criteria are relevant: coma, biological activity, loss of integrating functions, or the social utility of various proposals.
Suffice it to say that the definition of death, in the philosophical sense, remains controversial. There is broad acceptance of the social policy of accepting whole brain death as an indicator of death of the person, but the reasons for that policy are unclear. Some scholars maintain that the question of the definition of death is fundamentally unanswerable—that there is no “true” definition of death. Such definitions are only and finally social conventions, created to solve social policy problems. On this view, some definitions are better than others, but none can claim to be fully adequate. The debate about anencephalic infants is forcing us to clarify why and whether we redefined death in the first place, or simply created a policy to help resolve a problem.

**DEFINING ANENCEPHALY AS A SPECIAL CATEGORY**

Michael Harrison has advocated the statutory creation of a new category, “brain absent,” to identify anencephalic infants exclusively as a class of persons from whom organs could be removed without legal violation.\(^\text{13}\) The “special category” approach would avoid the quagmire of redefining or reconsidering death. It would, in essence, constitute a special exemption from those pans of the criminal code dealing with battery or homicide.

This proposal suffers from some of the same problems as redefining death; it is an overtly utilitarian move, possibly justified in this case, but inviting additional special categories as social demand for organs increases. If and when persistent vegetative state could be diagnosed with the same degree of certainty as anencephaly, the same arguments would seem to apply: great social benefit, with no violation of the interests of the patient from whom the organs were removed.

The uncertainty of diagnosis is an additional problem with this approach. Anencephaly, like all malformations, lies on a continuum with other developmental defects of the central nervous system.\(^\text{14}\) While infants at the extreme end of the spectrum clearly have no cerebral tissue, others will have some rudimentary cerebral tissue. And even if there could be agreement on the criteria necessary and sufficient to define anencephaly, there would be problems of misdiagnosis. Despite the claim that “a mistaken diagnosis is not possible,” not all clinicians or hospitals would be equally competent at making the diagnosis and errors have occurred with anencephaly, just as they have with the simpler (or easier) diagnosis of brain death.\(^\text{15}\)

The possibility for error is not a sufficient reason for prohibiting a practice, however. If it were, all of medical treatment would have to be banned.
But medical treatment is generally intended for the benefit of the patient to whom it is applied and who accepts certain risks of error in exchange for the potential benefit. No such benefit exists for the anencephalic infant, or the infant who does not in fact have anencephaly but some less severe malformation. This distinction might be academic, in that infants one notch up the scale of normalcy would still be profoundly malformed and arguably would have little interest in life-sustaining treatment. But they might be capable of suffering. And given the apparent misdiagnosis of some infants with hydrencephaly, it is at least plausible that some might have a life worth living, albeit a profoundly limited one. At the least, a statutory proposal should not be predicated on the assumption that the condition of anencephaly is distinct in concept or in diagnostic practice. If the community is going to authorize using some infants in this way, it should recognize the risks of unintentionally catching in the net others who were not expected to be there.

Finally, we should be clear about what we would authorize by this special category: killing of a human infant for the benefit of others. It is theoretically possible to remove the kidneys or liver from such an infant, close the wound, return the infant to the nursery, and let him or her die of the same causes that have led to the death of such infants for centuries. In such a case, killing would not be the proper term: battery, not homicide, might be the charge.

Removing organs in this way would obviously be a subterfuge for avoiding a charge of killing. The same assessment could be made regarding the Loma Linda procedure of ventilating the patient for the express purpose of allowing death to occur in a way that permits organs to be removed without legal liability. Removal of the heart could not be explained away with any amount of sophistry: it would be homicide, excused by the legislature because of its social utility.

Such killings would not appear to violate any interest of the properly diagnosed anencephalic infant. The concern would be over the possible effects on others—potential future patients who might become victimized as the barriers to killing weakened. Such “slippery slope” arguments cannot by themselves constitute sufficient reason for opposing a policy. Everything leads to something, often something bad. Some might have predicted at the invention of the wheel that it would someday be used to kill, but it would not follow that it should have been banned from the start. There is more at stake than just the sensibilities of others, which Caplan finds insufficient for prohibiting a practice. As Robert J. Lifton has reminded us, slippery slope
concerns are over real consequences—erosion of barriers against killing can lead to desensitization and brutalization of physicians and the circle of vulnerable patients can widen very rapidly. But it is not clear how great a role slippery slope concerns should have in shaping policy. They are fundamentally empirical questions that cannot be answered until history unfolds. The least we can say is that they should be considered, and that we should be vigilant about unwarranted extensions of the proposed policy.

ABANDONING THE DEAD DONOR RULE

If the purpose of redefining death was to facilitate discontinuation of life support and/or transplantation, it might have been preferable to achieve that goal in a more direct way. We could have retained our traditional concept of death but allowed removal of organs from living, nonconsenting patients under certain conditions that did not violate the interests of those patients. If we could agree that the reason it is permissible to remove organs from brain-dead patients is not because they are dead, but because no interest of theirs is violated it would be conceptually clearer that other patients might also qualify for organ removal without our having to insist that they are dead. That they have no interests is what leads Caplan to advocate using anencephalic infants as organ “donors.”

Referring to the central tenet in transplantation as the “violates no interests” rule, rather than the “dead donor” rule, would also acknowledge certain realities as true today as in 1968. First, there is ambiguity and disagreement about the “true” definition of death, indeed, over whether there is a true definition at all. Second incompetent patients do not have to be “dead” to justify removing their organs, legally or morally. The claim that it was necessary to redefine death to justify organ removal from brain-dead patients is belied by twenty years of transplantation without such statutory redefinition. Similarly, respirators and other lifesustaining treatments were and continue to be discontinued without requiring that the patient be declared dead. And third, redefining death under the stimulus of social need has undesirable consequences.

The primary objection to abandoning the dead donor rule is the same one raised regarding redefining brain death: the slippery slope concern that future patients might also be involuntary organ “donors” under circumstances less clear than those surrounding anencephaly. It could be argued that those in a persistent vegetative state have no interest in living either, or even those with Alzheimer’s disease, or the profoundly retarded. The prob-
lems of finding definitive criteria for these diagnoses, and reducing the risk of error in ascertaining whether a given patient met the definition, would still be present. Slippery slope concerns should be taken seriously and alert us to improper shifting of a boundary, but, as argued, they cannot by themselves be a sufficient reason to oppose a policy. If slippery slope arguments are trump cards, they also invalidate brain death as a redefinition of death, for that shift is already showing its slippery slope effect: the inclusion of anencephalic infants among the group of patients from whom organs may be removed.

THE NEED FOR A MORATORIUM

The problems associated with various proposals to use anencephalic infants as organ “donors” are not lethal to such proposals. Some of the issues raised are simply choices that must be made: Should we sacrifice the interests of present potential recipients to protect the interests of future possible patients who might be inappropriately used as organ “donors”? Should we redefine the conditions under which organs may be removed away from the “dead donor” rule towards a “violates no interests” rule. Before these choices can be made, certain empirical questions must be resolved and consensus reached on the reasons justifying removal of organs from anencephalic infants, through a respectfully considered process.

Thus, some empirical questions can and should be resolved before policy is established. Good ethics, after all, starts with good facts. Can anencephaly be precisely defined? Can it be diagnosed with an acceptable error rate? Will the brain stem of anencephalic infants die if they are adequately ventilated and perfused? Did the infants at Loma Linda die? How was brain death determined? Can brain death be reliably diagnosed in the first week of life? What are the outcomes, of organs and recipients, that have already been transplanted involving anencephalic infants as donors?

In addition, we need to rethink why we feel justified in removing organs from brain-dead patients. The traditional reason is that they are dead. I have suggested that this view, while popular and one that has served us well thus far, has problems. An alternative view is that we can remove organs from such patients even though they may be living because according to the present guidelines, we violate no interests of the patient or family by doing so. Caplan proposes that existing laws be modified to allow organ procurement from anencephalic infants on the grounds that they have no interests, but does not tell us why we should stop there. If the principled reason for including
these infants in the same category as the brain dead is the absence of interests, why not redraft the law in this principled way, rather than reconvene the legislature each time a new category of patients is identified that can be reliably diagnosed as having no interests. There is, of course, another alternative: prohibit removal of organs from such infants. If consensus cannot be reached on any of the current proposals, prohibition will prevail.

Whatever we do, it should be the result of consensus emerging from the broadest possible debate. In one recent case, a hospital ethics committee was asked by a surgeon for its judgment on whether he should remove a liver from an anencephalic infant whose mother ardently wanted the procedure performed. There was consensus on the committee that it would be ethically acceptable to proceed, but they couldn’t agree on the reasons. One member argued persuasively that this was an acceptable way to establish public policy: act first, talk later.

That is one way of achieving social consensus: to act, and invite society to accept or reject the action through legislation, litigation, prosecution, or public criticism. This has been the Loma Linda approach. Others have also operated by their own rules, including removing organs before death. The alternative is to seek social approval and consensus prospectively, through professional and lay publications, the legislature, the courts, national commissions, hospital ethics committees, and the like. The latter method is more likely to be orderly in the sense of including a careful consideration of the relevant facts, interests, and arguments.

I think it is preferable that complex and important policy questions be resolved prospectively, in an orderly way, rather than determined by physician behavior. Ethics is the business of finding justifications for actions. The reasons matter. If organ removal from anencephalic infants can be justified the reasons should be able to withstand scrutiny before the removal as well as after. A perception that hospitals and physicians are making up the rules as they go along, or operating with no dear rules, could jeopardize public support for the entire enterprise of transplantation.

For all these reasons, I favor a moratorium on transplantation involving anencephalic infants while we gather facts, debate the reasons, and develop consensus. A moratorium would concede that something irreversible may occur: potential recipients may die. But if our leading medical centers and practitioners tell us that it is responsible to “act first, talk later,” that doctors are entitled to make profound policy, what message does this send to the hospital and surgeon inclined to cross yet newer boundaries, to identify new
sources of organs beyond those with anencephaly. Just as war is too important to leave to the generals, transplantation policy is too important to leave to physicians. The questions raised by the debate about anencephalic infants are not primarily medical questions, though there are purely medical issues in need of resolution. They are fundamentally philosophical and ethical questions about the definition of death and the justifications for nontherapeutic interventions.

ENDNOTES


3 *Websters New Collegiate Dictionary*, s.v. “gift.”


9 President’s Commission for the Study of Ethical Problems in Medicine and Biomedical and Behavioral Research, *Defining Death Medical, Legal and Ethical Issues in the Determination of Death* (Washington DC: US Govern-
ment Printing Office, July 1981); Michael B. Green and Daniel Wilier, “Brain
Death and Personal Identity,” Philosophy and Public Affairs, 9 (Winter, 1980),
105–53; Robert M. Veatch, “The WholeBrainOriented Concept of Death: An
Outmoded Philosophical Formulation,” Journal of Thanatology 3 (1975),
13–30.

10 S. L. Brennan and Richard Delgado, “Death: Multiple Definitions or a Single Stan-
Fost, “The New Body Snatchers,” review of The Body as Property, by Russell

11 Capron, “Anencephalic Donors.”

12 Green and Wilder, “Brain Death and Personal Identity.”

13 Michael R Harrison, “The Anencephalic Newborn as Organ Donor,” Hastings
Center Report, 16 (April, 1986), 21–23; “Organ Procurement for Children:
The Anencephalic Fetus as Donor,” The Lancet, ii (December 13, 1986),
1383–85.

14 Michael Melnick and Ntinos C. Myrianthopoulos, “Studies in Neural Tube Defects
II. Pathologic Findings in a Prospectively Collected Series of Anencephalics,”

15 J. M. Laberge, “Transplanting Organs from Anencephalic Infants,” Canadian Med-
cal Association Journal, 137 (September 15, 1987), 473–74; P. A. Baird and
A. D. Sadovnick, “Survival in Infants with Anencephaly,” Clinical Pediatrics,
23 (May 1984), 268–71.

16 Caplan, “Should Fetuses or Infants be Utilized as Organ Donors?”

17 Robert Jay Lifton, The Nazi Doctors: Medical Killing and the Psychology of Geno-

18 Arthur L Caplan, “Ethical Issues in the Use of Anencephalic Infants as a Source of
Organs and Tissues for Transplantation,” Transplantation Proceedings (in
press).

19 Fost, FOSL “The New Body Snatchers.”

20 Lester W. Martin, Luis L. Gonzalez, and Clark D. West, “Homotransplantation of
Both Kidneys from an Anencephalic Monster to a 17-Pound Boy with Eagle-
Barrett Syndrome,” Surgery, 66 (September 1969), 603–607; Wolfgang Holz-
England Journal of Medicine, 316 (1987), 1069–70.

21 Norman Fost, “Ethical Problems in Pediatric,” Current Problems in Pediatrics, 6