

In Defense of Human Organ Transplantation

"What is man?" asks the poet in the well-known 8th Psalm.¹ Thou hast created him a little lower than the angels, and hast crowned him with glory and honour. Thou madest him to have dominion over the works of thy hands; thou hast put all things under his feet. . . ."

What is man? The affirmation of the book of Genesis is that God created man in His own image. St. Paul, writing to the Christians at Corinth, asked, "Know ye not that ye are the temple of God, and that the spirit of God dwelleth in you?" The Judeo-Christian conviction is that man is created by God as a thinking, feeling, believing being, created to have dominion over the earth and to serve God in doing so.

In three and a half years of working with an artificial kidney and kidney transplant program, I have become acutely aware of the problems associated with organ transplants as a treatment for chronic disease, and I have had to rethink my beliefs about man, about life and death, about the sanctity of the human body as the "temple of God." Is it morally right to spend thousands of dollars a year to keep one person alive on an artificial kidney, when that money could perhaps save thousands of persons from starving in Africa?

Is it ethical to remove an organ from a living person, subjecting that person to the accompanying risks, in order to transplant it into an ill relative? Is a surgeon justified in taking an organ from a dead person and imbedding it in the body of a living recipient? I cannot answer these questions for you—they are yours to live with and to answer according to your own conscience. But I would like to share some thoughts with you on this subject.

The ethical implications of human organ transplantation were suddenly thrown into the public eye when Drs. Barnard and Kantrowitz performed the

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first heart transplants. Whereas kidney transplants have become relatively common, heart transplants have captured the attention of the whole world. Men and women in all walks of life have watched the successes and failures of these history-making operations. They may not understand the technicalities, but they are acutely interested in what is happening. And the medical profession has been joined in controversy over the medical, legal, and ethical aspects of transplantation.

What has been the background leading up to this step? The first consistently successful transplants from man to man were of corneas, starting in 1905. The transfusion of lamb's blood and human blood into other humans was not successful until researchers learned to type and crossmatch the donor's blood with the recipient's. The next big step was the transplanting of a kidney between identical twins in Boston in 1954. More recently, successful transplants have been performed using kidneys from non-twin relatives and from patients in whom death has just occurred. As progress continues in conquering the body's rejection processes, these operations become more common. Eye banks are common, as are the resulting corneal transplants. Over 100 heart transplants have now been performed, including the Houston group's use of an artificial heart while awaiting a donor.

WHAT IS MAN?

What problems have arisen to arouse ethical and moral objections to such operations? The doctors performing them consider them to be definitive treatment of critically ill patients rather than experiments. They try to make one healthy individual out of two individuals who have no chance for survival. Why then has there been so much criticism over the heart transplants?

First, there is the question of the Psalmist, "What is man?" Is he a complete and single organism which cannot be divided? If so, the removal of an inflamed appendix would destroy his life. Someone with only one arm or one leg could not be considered a person.

Is man not rather a complex being consisting of many members all of which work together in harmony to produce a state of health? If one member is out of tune with the others, it should be treated or removed. If a diseased or malfunctioning organ can be replaced by a healthy one from another source, this improves the health of the recipient. The whole field of medical science is dedicated to maintaining the best possible health for mankind.

Philosophers and theologians have pondered the questions of life and death for centuries. In the writings of Plato we see his classic picture of the "otherworldly" attitude to the body and earthly life. I quote from his "Phaedo": "Socrates: 'Do you believe that there is such a thing as death?' 'To be sure' replied Simmias. 'Is it not the separation of the soul and body? And to be dead is the completion of this; when the soul exists in herself, and is released from the body and the body is released from the soul, what is this but death?'"

In contrast, the Jewish view dominant in the Old Testament sees man as an indissoluble psychophysical unity. He is not a material body

plus an immaterial soul. Toward the end of the Old Testament period, elements within Judaism came to affirm the reality of life after death and affirmed a divine raising up of the whole person from the grave. In Christianity we find clearly, in the thought of St. Paul, the conception of a spiritual body, as will be discussed later. And now, in our scientific western culture, many people, including active Christians, find it difficult to take seriously any doctrine of life after death.²

One Ottawa minister has stated, "The human personality is sacred, but the human body when life has ceased is not more than a dis-used receptacle through which human personality once expressed itself; it may be cremated, left to rot in a grave, or used for medical purposes, of which the latter seems most Christian."³

Sufficient Research?

We must also consider the question of whether sufficient research has been done to warrant heart transplants. Doctors on both sides of the Atlantic have stated that these transplants were premature. The dangers of transplanting a heart or liver are more frightening than with kidneys.

To remove a man's heart, even if it is severely damaged, is tantamount to killing him. If a kidney transplant fails, the patient's life can be maintained by an artificial kidney machine, but no such machine exists to do the work of a heart or liver. If such a transplant fails, the patient will die.

Those surgeons who have performed the operations maintain that they have progressed as far as possible with animals and the next step forward has to be man. And another factor has to be considered. Researchers can experiment on healthy young animals for years without establishing what will happen when the same operation is performed on a critically ill, middle-aged man.

So many systems of the body are damaged by chronic heart, liver, or kidney disease that the transplant candidate is a poor risk to start with. In many cases, his only chance of surviving more than a few days lies in a transplant.

WHAT IS DEATH?

The third question that comes to mind involves life and death. Dr. J. S. Whale, a contemporary British

theologian, writes as follows. "What, then, is the ultimate meaning of man's life? What does the glittering tumult of human history, the glory and tragedy of the human centuries, all come to? The cynic has answered that life is a comedy to him who thinks, and a tragedy to him who feels. The religious man answers that it is a victory to him who believes."

Believes what? What may we believe about the problem which has vexed thought and tried faith in every generation, namely, the problem of death. . . . Making sense of life means, ultimately and always, making sense of death.

"In the first place, death is the one certain fact. . . . death is the only prediction which we can make about human history with absolute certainty."⁴

Several Christian and Jewish clergymen were interviewed in Ottawa shortly after the first heart transplants were performed, concerning the religious point of view. They all said that such operations were permissible if the donor were actually dead, but they stated that any person about to die, including a prospective donor, must be given every chance for survival.

Modern science has found many ways of prolonging life in terminally ill patients. Intravenous fluids are given to the unconscious patient who is unable to drink. Respirators take over when a person is no longer able to breathe for himself, and cardiac pacemakers stimulate a failing heart. More and more doctors state the time of death as that point when there is no evidence of brain activity, when the brain no longer functions despite mechanical stimulation of the heart and breathing.

More than 200 lawyers met over a period of months in the United States to draw up the Universal Anatomical Gift Act. They refused to state a legal definition of death, feeling that it was not a subject which could or should be legislated. Such a decision must be made by the medical profession, and, in fact, many medical organizations have already prepared definitive statements.

A LEGAL PROBLEM

The question of when to "pull out the plug" and let death occur has taken

on new urgency in the era of cadaver organ transplants. Where is the line to be drawn between those to be resuscitated and those not to be? The surgeon wants the organ as fresh as possible, and the sooner it can be transplanted, the better are its chances of working. In order to get it, he faces the challenge of talking with the grieving family and asking their permission to remove an organ. This takes the utmost in tact, understanding, and compassion. The wide interest in such surgery created by the current publicity has undoubtedly made more people willing to sanction the gift of an organ to help an ailing fellow man. In most countries it is illegal to remove an organ from a patient who has not been officially pronounced dead. And the world pictures the surgeon hovering over the bed, waiting for the prospective donor to die!

The question arises as to whether laws and standards of ethics have kept up to date with medical technology. Gordon Rattray Taylor, in his book "The Biological Time Bomb," tells of an interesting example. In British and American law, it is an offense to do anything which makes one unable to serve his country, to consent to such a thing being done, or to do it to another. Such an act is known as a maim and the law dates from medieval times. It was illegal to remove a front tooth as one might wish to bite an enemy! This law governs transplantation from a living donor. Today it is interpreted more broadly in the interests of health. But it is by no means clear that it allows a surgeon to remove an organ from a living donor, or that a person can consent to such an operation.⁵

THE ORGAN DONATION

Returning to the original questions of this essay, one must consider the ethics of donating organs for transplantation. In the first place, laws aside, has the medical profession any right to ask a living person to undergo surgery in order to donate a kidney to a relative? Unquestionably we have the right to ask, and just as unquestionably the person has the right to refuse. There is no room for condemnation of the person who hesitates or refuses to accept the risks. But, in actual fact, love seldom says "no".

The previously quoted minister has

offered some thoughts on living donors. "Sacrifice is an accepted principle of Christian living. It is therefore not only ethical but Christian service for a human being to offer to another human being the possibility of prolonging life.

"The prolongation of life is Christian because while we live we exert on others an influence, even while incapacitated physically. Thus to transplant a kidney from one living human being, who is ready to take this risk and to make this sacrifice, is to give another human being the opportunity to continue to express their personality, and thus in some way to serve others."⁶

However, some surgeons refuse to take organs from living donors, saying that the Hippocratic oath prevents them from injuring the healthy. Their convictions must also be respected.

A RELIGIOUS PROBLEM

But what of the surgeon's right to take an organ from a dead body? To the Christian this should present no problem. We know nothing of life after death. We walk in faith. But since archeology proves that the body remains where it is buried, we must accept that the spirit of man leaves his body at death. St. Paul, in his eloquent defense of resurrection, wrote, "It is sown a natural body; it is raised a spiritual body . . . flesh and blood cannot inherit the kingdom of god. . . ." There can be no objection then to moving part of a dead natural body to the natural body of a dying man. But religion faces a challenge, and may not be able to take as long working out an attitude as it has done in the case of abortions and contraception.

Representatives of four faiths have made statements on death, donation, and transplantation. In 1964, Roman Catholic Bishop Fulton J. Sheen stated, "Life may be prolonged by either ordinary or extraordinary means such as a battery of tubes and devices in a terminal cancer patient. No one is obliged to use such extraordinary means and there would be no moral difficulty in asking that they be removed." This statement leaves in doubt what is ordinary and what is extraordinary.⁷

Dr. Immanuel Jacobovits, Chief Rabbi of the British Commonwealth, says that Judaism "emphatically denies" the right of the doctor to let his patient die in peace, since it derives its sanction from the Biblical "thou shalt surely cause him to 'be healed'."

What we must do is take the principles found in the Bible and relate them to the specific situation in which we find ourselves. And one of the foremost principles of the Bible, one that can readily be applied today, is concern for one's fellow man.

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But he qualifies this by adding that Jewish law does not require the physician to prolong the patient's misery by artificial means. "Artificial" remains undefined.⁸

Dr. Robert McClure, a surgeon and the present Moderator of the United Church of Canada, recently commented on one of the aspects of transplantation that bothers him. As a former missionary, he shakes his head at the enormous cost—\$20,000 to \$50,000—for a transplant. "It's a luxury only an affluent country can afford," he says. "In India we could give 140,000 children lifetime immunity against polio for that amount. On the other hand, this is the way frontiers in medicine are opened up. It's peanuts compared to the money spent getting to the backside of the moon."⁹

And from outside Judeo-Christian tradition comes the statement of Islamic scholars from 23 Moslem nations meeting in Malaysia in May. Although tradition forbids the desecration of the Moslem dead, Islamic law hold that life must be preserved if at all possible. Human transplants are a legitimate life-saving tool.¹⁰

AN APPLICATION OF PRINCIPLES

It is a well-known fact that anything can be proved by quoting some Biblical text. Yet I would not dare to claim that the Bible is in favor of human organ transplants. It is obvious that we cannot find there any detailed outline for Twentieth Century technology.

Biblical faith claims God as Creator, and as such He has a purpose for this world. Our task is not to try to escape from God's world, but to live in it in a way that furthers His purposes. To believe in creation is to believe that ethical action is necessary in conformity with the will of God. And I believe that it is God's will that man should use his knowledge and skill in every way possible to improve the lot of mankind.

Biblical faith holds that God sent His son to save mankind. If mankind meant that much to God, it surely must be important to us. And if it is important to us, it is our duty to give all we have and are for the physical salvation of man.

Biblical faith contends that God created man to have dominion over the earth and all that is therein, whether in agriculture, business, education, or science. Man, the highest of God's creatures, has now learned another method of preserving and maintaining human life. May God grant us wisdom and skill and patience in using this knowledge!

NOTES AND REFERENCES

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*“Test-tube babies?
Postponing death?
Mind control?
The semi-artificial man?
Brain without a body?
Genetic warfare?
Creation of life?
Is sex necessary?
Where are we going?”*

These questions appear on the dust jacket of Gordon Rattray Taylor's book, *The Biological Time Bomb*, and they tempt the browser to look inside. The author, a scientific journalist, has done his homework well, probing the contemporary medico-scientific world in an attempt to discover the immediate biological future of mankind. Avoiding science-fiction and sensationalism, he has written an exciting and challenging book, of interest to everyone who is concerned about humanity.

Beginning with 'the biological breakthrough', the author considers the advances being made in the field of genetics and procreation. With hormonal control now readily available, and considering the prospect of test-tube babies, he asks, "Is sex necessary?"

AmSECT and CanSECT members will be especially interested in the chapters entitled "The Modified Man" and "Is Death Necessary?", which deal with artificial organs and transplantation. ". . . in addition to these three obvious areas of demand — disease, accident and cosmetics — there are others of a more bizarre character.

The obvious endpoint to which such a trend leads is the total reconstruction of the human body. Given a trunk to start with, arms could be added from one cadaver, legs from another, liver from a third, kidneys from a fourth, and so on." This leads to a consideration of the ethical and psychological problems involved, as well as the technical. ". . . if we acquire prosthetic organs which are identical with those carried by other people, we may feel the less unique, the less ourselves."

On the question of death, Rattray Taylor writes, "Even if cell death can-

not be wholly prevented, the replacement of worn-out parts by implantation techniques may provide an indefinite possibility of life extension. It is the prevention of senility . . . which represents the real problems. The social consequences of immortality, however, would be so serious that it would be disastrous to make use of such an achievement, except by way of rarest exception."

The next three chapters deal with such topics as mind control, DNA and genetics, and laboratory manufacture of living cells. The closing chapter considers "The Future, If Any". This includes a review of current trends in dialysis and the shortage of facilities. "The fact is, of course, that we do not need a mathematics of mercy—we just need more kidney-dialysis machines."

Perhaps one of Mr. Rattray Taylor's prime theses is best expressed by the following comment. "The new biomedicine may lead also to problems on the international as well as the national scale. The first issue is a moral one: is a country justified in providing for itself such super-services as brain-treatment or life prolongation when, elsewhere, people are dying of malnutrition and the expectation of life is between 20 and 30 years? Even if they feel excused morally, politically this could become a difficult issue."

This book said a lot to me. Mainly it said that perhaps we are doing too much research too fast, perhaps we should stop experimenting with the very basics of life, before we have gone too far and the Biological Time Bomb explodes in our faces. I would certainly recommend this book to anyone who is at all concerned about the rapid advances being made in the biological sciences. Some of the words used are foreign to those of us who are not experts, but on the whole the book is very readable and extremely interesting. After all, "Where are we going?"

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Book Review

THE BIOLOGICAL TIME BOMB

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The World Publishing Company,
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