

ORGAN DONATION

Potential transplant recipients and their physicians remain frustrated by advances in the field allowing successful transplants while an inadequate supply of organs for transplantation persists. The number of patients awaiting solid organ transplantation in the United States now exceeds 90,000. Unfortunately, the number of organ donors in this country remains static at around 6,000 per year. Since many of these donors provide more than one organ, approximately 17,000 deceased organ transplants are done annually. Unfortunately, not all potential recipients receive an organ, and nearly 6,000 people a year die while on the waiting list. This number approximates the number of deceased donors deemed suitable for donation, but for whom consent was not able to be obtained. Thus, the field of transplantation continues to battle an ongoing shortage of donor organs, a shortage that continues to result in the loss of human life.

A number of strategies to decrease this shortage have been instituted. **Public education** regarding the gift of life has been instituted at a number of levels including state, federal, and in corporations. Despite these well meaning efforts, public education has done little to increase the number of organ deceased donors each year. The **American Society of Transplantation (AST)** supports these efforts, especially in areas with low donation rates. **Required request** laws have been instituted by all fifty states and the District of Columbia to ensure that health care providers approach ALL families of potential organ donors about donation once brain death has been determined. Unfortunately, many health care providers are unaware of state laws; one study showed consent was obtained in no more than half of the cases. The AST has supported the development of programs that train individuals to identify potential deceased organ donors, assist in the consent process, and stabilize the donor so that donation can proceed in an expeditious manner.

By identifying potential donors early, the AST believes the likelihood of recovering organs will increase. **Routine notification** requires a hospital representative to report ALL deaths to the local organ procurement organization to determine patient eligibility for donation. This policy is currently in place in only a few states. In those states, only a small increase in deceased donation has occurred. **Mandated choice** requires all individuals to designate and document their wishes regarding organ donation, thus eliminating the need for surrogate family decision makers at the time of death. Routinely, the decision would be made at the time of a driver's license renewal. However, an experiment in the state of Texas showed at least 80% of individuals actually refused to designate themselves as organ donors, leading to the law being repealed. **Donor registries** operate under a similar premise. These databases would be available around the clock so potential donors and their decisions would be available to

families and health care providers. This proposal has raised some concern regarding the unintended disincentive of having one's name on a national list. Studies of this approach have been limited by brief follow up and small numbers of participants. The AST suggests donor registries be the focus of a rigorous pilot trial prior to being instituted on a national level. **Presumed consent** assumes all individuals are willing to become organ donors unless they specifically document otherwise. This documentation requires proactive, defined, and legally sanctioned measures to register the refusal. Although no state has instituted such a program in the United States, several European countries have successfully implemented this policy. It does not appear that this approach would address the need for organs in the United States.

In light of the relative lack of success in increasing the number of deceased organ donors using these approaches, the role of **financial incentives** for organ donation has been debated. This discussion does not advocate the sale of organs as a commodity. In fact, the National Organ Transplant Act of 1984 forbids "...any person knowingly acquire, receive, or otherwise transfer any human organ for valuable consideration for use in a human transplantation if the transfer affects interstate commerce." The AST supports altruistic donation in its Ethics statement. Specifically, the AST believes, "Living donors, families, or friends of living or deceased donors ought not to profit financially, nor should they be financially disadvantaged from donation." More recent proposals have dealt with a limited incentive such as contributions towards the donor's funeral expenses or a modest lump sum payment to a beneficiary of the donor. These incentives would be given as recognition of the donor's life saving act, possibly similar to that awarded the family of a soldier killed in the service of their country. Much of this debate has centered on whether financial incentives are actually of proven benefit (this has not been studied) and whether even a "small" award constitutes payment.

The AST is opposed to payment for organs from living and deceased donors. Clearly, a number of unanswered questions remain regarding financial incentives for deceased organs. Does any payment compromise what was previously seen as an altruistic donation? Or does recognition of a life saving gift with financial remuneration equate to other situations in our society for which similar awards are deemed appropriate? The AST proposes that these questions merit broad discussion and require careful study. Small pilot programs might provide needed information that could be used to answer these difficult questions.

The AST also supports innovative methods for increasing the pool of available donor organs. **Donation after cardiac death** (DCD) has increased on an annual basis, with nearly 6% of kidney transplants and over 3% of liver transplants performed using these organs in 2004. Smaller numbers of lung transplants have also been performed. Unlike the organs obtained from a

deceased donor after brain death, organs from a DCD donor are currently recovered following a five minute observation period after the onset of circulatory arrest (lack of blood pressure and pulse), the lack of spontaneous breathing, and unresponsiveness. For example, donors may have had a cardiac arrest either inside or en route to the hospital with failed efforts at resuscitation. Function of a kidney from a DCD donor is comparable to that from a brain dead or deceased donor. The early experience with livers from DCD donors have shown an increased risk of dysfunction, with slightly lower rates of graft and patient survival, largely due to an increased risk of complications affecting the biliary system. These problems may be decreasing with experience. Currently, most transplant centers consider DCD kidneys comparable for transplantation to that from a deceased donor after brain death. Further study of the use of DCD organs are needed before definitive recommendations can be made. The AST supports efforts at improving the techniques used in recovering organs from DCD donors, with the hope of further increasing the number of available donor organs with improved long term outcomes.

In summary, the AST supports the following initiatives:

- Ongoing efforts to educate the public regarding organ donation;
- Recognition of both deceased and living organ donors for their unselfish gift of life;
- Careful study and federal funding of proposals, such as donor registries and financial incentives, that may have a positive effect on the rate of deceased organ donation;
- Federal funding of studies of the science of organ donation, in order to optimize the management of the deceased organ donor.
- Efforts to improve the techniques used in recovering all organs from DCD donors, with the hope of further increasing the number of available donor organs with improved long term outcomes.

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