

Cover Letter

At the time of my ASTS presidency I also assumed the position of Chair of the Department of Surgery at UCSF. Despite this added responsibility, transplantation has remained my primary interest and clinical focus. The reasons I was attracted to transplantation in the first place have remained as the basis of my continued interest and enthusiasm—the opportunity to alter a patient’s life in a major way through successful transplantation has been the basis of my clinical life.

The national landscape of transplantation in 2000 provided us with challenges. The issue of ASTS as an “exclusive” club versus making the club more inclusive was enthusiastically debated. The relationship with AST was strained in the competition for size and influence. I felt that my tasks were to enhance the ASTS-AST relationship and to foster joint efforts and activities. I was also determined to put ASTS on a sound financial footing with an anticipated decrease in support from pharma going forward.

The AJT provided both an opportunity to address the concern of less industry support as well as to provide another avenue through which ASTS and AST could work collaboratively. Efforts at enhancing membership were undertaken with colleagues in cardiac and thoracic transplantation.

I was also determined to modernize lobbying efforts in order to increase our understanding of governmental policies and opinions and to also increase our influence in Washington. The ASTS presidency has been the pinnacle of my transplant career, an affirmation of a choice that required commitment and sacrifice. The purpose of my presidential address was to try to place our transplantation practices and values in the context of religious teaching prevalent in western culture. My premise was that our attitudes and practices as transplant physicians, surgeons, patients, and caregivers are based on the values of devotion and sacrifice. In addition to my professional life I have had a long interest in Western art and the themes in religious art. I used the stories of the Christian martyrs as a parallel to the families of cadaveric donors who “sacrifice their loved ones” for “immortality” (life after death) and the leap of faith of live donors who put themselves in harm’s way to aid another human being. In this context I looked for the basis of altruism and looked for the role of the transplant surgeon and physician.

Presidential Address

Today I'd like to review with you some of my favorite Christian martyrs. But first I need to express my deep gratitude to ASTS members for allowing me to serve as your president. I am particularly indebted to past president Ron Busuttil and president elect Marc Lorber for their counsel, other executive council members Avi Shaked and Dick Howard and the entire council and committee chairs. I am also grateful to Mo Sayegh, Larry Turka, Bill Harmon, and other AST leaders for their support. I want to thank Gail Durant and her administrative staff for their commitment, understanding, and hard work.

And I am particularly obliged to UCSF colleagues; a cohesive group who are my friends, make up a great team, and have been extremely supportive this year.

Over the past year ASTS has fortified its strength at the same time that it has made great progress in continued and growing cooperation with AST and other key groups. Our own membership has grown significantly in the last year, with a major increase in the targeted groups of cardiothoracic physicians, surgeons, and scientists. Council member David Follette has been extremely helpful in this endeavor. He has successfully expanded our educational mission to include review and accreditation of cardio-thoracic transplant training programs and forged important educational exchange with the major cardiothoracic organizations. Tom Peters and his awards committee received a record number of award applications this year. They expanded support for middle level faculty, developed a new award for cardiothoracic transplant investigation, and added a grant for cooperative trials, further echoing our commitment to scientific cooperation.

We have come together with AST to launch the *American Journal of Transplantation*, for which we are extremely grateful to Phil Halloran and his talented group of editors. The Joint Transplant 2001 reflects our continued enthusiasm and commitment to joint projects and shared scientific interests. We have worked on collaborative projects in living related transplantation; developed a joint white paper on the issue of compensation for donor organs; and are developing a position paper on the maximum utilization of donor organs. Both societies are grateful to Frank Delmonico for his wise leadership in these projects.

ASTS has successfully engaged our young members through the Vanguard Committee. This group led by Ken Drazen organized a lively meeting this winter covering the technical, ethical, and medical issues of live donor kidney and liver transplantation. Next year's ASTS winter symposium planned for late January will address the theme of ischemia reperfusion injury of grafts and cells, a topic that goes beyond preservation to tissue injury and regeneration.

The ASTS sponsored a Mayorathon to generate interest in organ donation with participation of mayors and civic leaders from California to Washington DC. The mayorathon ended on August 14, 2000, at the Montgomery County Agricultural Fair outside Washington. We also brought industry, government, and interested ASTS and AST members together to strategize organ donor initiatives; this initiative is ongoing and will benefit from the avid interest in this area by the current administration. A fresh look at governmental issues through the able leadership of Peter Thomas, Jeremy Allen, and colleagues at Powers, Pyles, Sutter and Verville will keep ASTS positioned in Washington.

The ASTS set up the live donor liver registry through the leadership of Mark Adams, and we recently initiated a web-based split liver registry organized by John Renz. Bob Merion and his ASTS Informatics committee have worked hard developing a new ASTS website this year to provide more information for members and the public. To the same end, Mike Abecassis and his committee have revised the *Chimera*. Paul Kuo and the Scientific Studies Committee are working with FDA staff and AST to revise transplant study designs.

But now let's get back to the issue at hand—the Christian martyrs. The rationale for this discussion is severalfold. First I thought it would be stimulating and educational for my friend and colleague, AST president Dr. Mohammed Sayegh, in his understanding of Judeo-Christian thought. Second, the spiritual underpinnings of our society have greatly influenced how we live and how we practice medicine and transplantation. Third, in my own surgical career I have found

the study of Christian martyrs to be inspirational. When I first came to Minnesota in 1974, Dr. Najarian still believed that interns made the best retractors. I think he enjoyed and valued the audience that we provide, and the exchange across the OR table. As I became adept at surgical retraction, I passed the time by doing a silent mental review of the Christian martyrs. I knew them by heart and used to recite them in alphabetical order.

Finally, there is a rich connection between life-threatening illness, the transplant surgeon, transplant physician, donor and recipient—a covenant of sorts—a bond which is a rich tapestry through which we are committed, woven through duty, hope, and promise. We are bound by our duty to do the right thing, we are bound by the hope that we have, and that our patients have in us that we will make things right, and we are bound by the promise of return to health—a second chance at life.

So my purpose today is not solely to regale you with ancient tragic tales—religious stories which may sound like fairy tales—but to use these allegories to describe what I think are some of the religious and spiritual and cultural bases for transplantation. In case you have wondered, the difference between a saint and martyr is important. A saint dedicates his or her life to serving the church, while a martyr is an individual who sacrifices his or her life to that commitment. A more secular definition of a martyr is one who chooses to suffer death rather than renounce principles. People who are experts in religious study know that the church has strict requirements for saints and martyrs—like how many miracles an individual has performed—but these details are not essential for the present discussion.

Information regarding the lives of the martyrs can be found in the *Golden Legend*, Eusibus' *History of the Church*, and Foxe's *Book of Martyrs*; the books were the basis of my study. There are also extensive references in various books on art and philosophy. The age of the martyrs refers to the early four centuries of Christian persecution, chiefly by the Romans. Later martyrs can be found among other Christian sects who had diverged from the church; these martyrs actually suffered at the hands of the Catholics within the church and without question, if you reflect on it, every ethnic and religious group has suffered martyrdom at some time or another.

So the theme of suffering for your principles and achieving spiritual peace in the face of disaster is universal. One of the interesting features of the martyrs is that in spite of being tortured, in a wide variety of ways, under a wide variety of circumstances, the martyrs were very hardy and invariably survive many of these tortures only to eventually die by the sword. A little bit like cartoon characters who bounce back when they get hurt. There are exceptions of these general martyr rules. More important than how the specifics of the martyrs die is the serenity with which they meet their fate—calm in the face of hardship or disaster. Calm in the face of disaster, as we all know is a central theme for the transplant team, the donor whether cadaveric or alive, and the transplant recipient.

The first Christian martyr, known as the protomartyr, was Stephan. He was actually persecuted by the Jews and not the Romans and died around 35 AD. He started as a devout Jew. At first he was a vocal critic of the teachings of Christ but incurred the anger of the Jewish legislative council when he publicly renounced his previous beliefs as he became convinced that Jesus was the son of God—he is said to have had a vision of Jesus at the right hand of God. He was driven

out of the gates of the city. His final prayer before his death is for forgiveness to those who would harm him: "Lay not this sin to their charge." In art, an attribute is a graphic symbol through which you can identify an individual. Stephen's attribute is the stone—the agent of his martyrdom; so when we see a figure being hit by stones, we think of Stephen. When Stephen's grave was discovered in 415 AD his body was taken to Rome where it was placed in the tomb alongside St. Laurence. In art as well, St. Stephen is often shown in St. Laurence's company.

Laurence was a Christian martyr of Spanish birth. As Pope Sexton II was about to be martyred himself, he asked Laurence to give away the church treasures. When the Roman prefect called upon Laurence and insisted that the riches be given to him instead, Laurence gathered the poor and sick around him and told the prefect that they, the sick and the poor, were the true treasures of the church. His attribute, and the source of his death, is the gridiron. His fate was to be roasted. He met his fate with notable calm, observing, "See I am done enough on one side, now turn me over and cook the other."

Many of the martyrs were women whose fidelity to the church and Christ put them at odds with the carnal world. Margaret of Antioch, Catherine of Alexandria (the patron saint of education), Agatha, Barbara, and Lucy were examples of chaste maidens who were sacrificed rather than renounce their faith and get married. Margaret of Antioch innocently refused the advances of the prefect of Antioch, telling him she was already committed to Christ. She was thrown in a dungeon where Satan appeared to her in the form of a dragon and devoured her. Using the cross in her hand, she burst out of the dragon and was delivered safely, at least temporarily. Her safe deliverance from the dragon has made her the patron saint of childbirth. She was subsequently beheaded. In this panel, she is shown standing on the dragon over whom she was victorious. Catherine of Alexandria, a woman of great wealth and education, also refused to renounce her faith. She was tortured on a wheel prior to her beheading.

Agatha, a popular image, rejected the love of a Roman emperor who subjected her to many tortures including the severing of her breasts. This injury was healed by St. Peter. She is often pictured carrying her recently severed breasts on a saucer and modestly covering her wounds. Her image of serenity in the face of this bodily assault has served as an inspiration to breast cancer sufferers.

Barbara's attribute is a tower where her father had planned to imprison her. The original plan was for two doors which were to be guarded. But she convinced the workmen to create another entrance through which the priest could enter so she could take her vows of chastity. Her father became so enraged at her conversion that he betrayed her to the Romans and beheaded her himself.

Lucia or Lucy was the virgin martyr of Syracuse. She died around 300 AD during the reign of Diocletian. Her mother had been cured of some malady at the shrine of St. Agatha—this moved Lucy to devote herself to the church and rid herself of riches. She suffered many tortures and eventually was stabbed through the neck. Lucy's name refers to light or enlightenment—her attributes are a lamp or two or more eyes. She is said to have plucked out her own eyes in response to a suitor who persistently praised their beauty. She is a symbol of spiritual truth.

Cosmos and Damian have long been known to us as the patron saints of transplantation through their miraculous transplantation of a Moor's leg onto a Christian—these two noblemen were better known for their compassionate treatment of plague sufferers. They are often depicted with heads bowed or kneeling together about to be beheaded. Sometimes they are shown with stigmata of the bubonic plague.

The imaginative, often gruesome forms of martyrdom made for sensational subjects of the art of the time—kind of like a medieval *National Enquirer*. Sebastian pierced by arrows (which miraculously avoided all major organs and were removed by Irene, the first nurse). Mark dragged through the streets, John the Evangelist immersed in a vat, Clement weighted down by an anchor and thrown overboard, Laurence roasted on a gridiron, Bartholomew flayed, and Erasmus who was disemboweled. Wild images; what myths are made of. Of course the church officially abandoned many of the martyrs in 1969—some of my favorites such as Margaret of Antioch were eliminated from the martyr list because of insufficient data supporting their existence. But what do these people or myths mean to us, the transplant community—we who strive for a variant of immortality either for us, for brilliant discovery, or for our patients through the miracle of cheating death—perhaps indefinitely?

The martyrs were, by and large, undistinguished folks—not necessarily the famous, or the smartest, or the people in charge—people who went from obscurity to immortality with their acts of legendary martyrdom based on a surrender to faith. Not unlike our cadaveric donors who gain a measure of immortality by giving life to a dying recipient. Of course, the cadavers do not willingly sacrifice themselves for this—their families make the choice—but in some way the donors do go on living. Many of the cadaveric donor families give accounts of moving discussions that had previously taken place, during which the person destined to be a donor expressed a strong desire to pass on life through donation; families cherish the generosity of the deceased and see it as a triumph of sorts. You may have observed that many of the martyrs I've shown you are pictured with a palm leaf which is a universal sign of martyrdom. Though the palm was originally a symbol of military victory, the church adopted it as a symbol of Christian victory over death.

William Alger, the 19th century theologian, said, "The wealth of the soul is measured by how much it can feel." So the cadaveric donor lives on through a selfless act of family and loved ones and in some ways transforms a senseless death into a symbol which transcends the death; the palm is an apt symbol—a victory over death. Soul, as defined in Webster's Unabridged Dictionary, is "a) the principle of life, feeling, thought, and action in man, regarded as a distinct entity separable from the body and commonly held to be separable in existence from the body; b) the spiritual part of man as distinct from the physical part." In some way, the donation process liberates the soul and liberates living organs from the lifeless body.

I recently participated in a discussion in Washington led and organized by the new Secretary of Health and Human Services, Tommy Thompson. From around the table, people representing various transplant interest groups were in turn called upon to give him advice about increasing organ donation. When it was the turn of a donor mother whose son had died some years before, I was struck. She told us that the transplant community should not ask for more from her, as all had been taken from her son and thus from her—but instead we should offer the opportunity for

her son to live on—in the spiritual sense by the use of his organs in transplantation. Though the act of donation does not change the inevitability of death, the individual's fate in history is altered from oblivion to remembrance.

Over the past twenty years there has been an interesting juxtaposition in terms of the relationships of the parties involved; the transplant surgeons and physicians who played an active role in interacting with donor families are now purposely removed from the donor process for fear of conflict or exploitation. Others now give comfort. In addition, whereas donor families and recipients were kept apart in the past, now they commonly contact and celebrate with one another. Donor families talk about the life force—the spirit being passed on. And what about the live donor? Although some family members and friends decline the opportunity to be a live donor, more and more people have embraced this role. Many tell us they know they are "the one." They know it is a privilege to really help someone else. They know it is a privilege to be a hero and to save another. Legions of living donors who suspend reason and put themselves at risk for the benefit of their loved one—or even more fantastic, for a stranger, someone they do not even know. A virtual "leap of faith" as they put themselves in our hands for safe keeping.

The new phenomenon—the good Samaritan donor—tries our comprehension. We have difficulty understanding the motivation of strangers who are willing to endure pain and risk of death. Do they do it to revive their spirit and achieve a measure of greatness? If so, they succeed. Do not these donors parallel the martyrs who gladly walk into harm's way for their faith, or for their loved one, or even for a stranger? Sister Wendy Beckett of the Notre Dame order, a noted art historian, tells us, "Holiness can so easily appear as something remote ... yet to be a saint is a wholly practical and realistic growth into our own truth. It is what we are all meant to become."

If not modern day martyrs, then legions of live donors are certainly modern day heroes and saints. A quote from the book *Great Religions of the World*: "To a pagan calling for blood, such readiness to lose it seemed madness. Not to Christians. Martyrdom was better than baptism, for it washed away sin at the moment when a man could sin no more. Steeled by the prospect of instant sainthood, the martyr endured their agonies often with a bravery that moved jaded pagans to embrace such compelling faith. From the account of Polycarp's death....each year they hailed with great gladness and joy the birthday of his martyrdom." So here is a celebration of the day of martyrdom or rebirth. It brings us full circle to the recipients who with their families face incredible odds to achieve renewed life and health—a test of their faith in us. How often do recipients christen their transplant date as their new birthday?

And what of us and our part? If the cadaveric donors and recipients and live donors are contemporary martyrs and saints, what does that say for the transplant surgeons, physicians, and other transplant professionals? Just what is our place in all of this? Maybe some of us strive for our own immortality either through a new idea, a new procedure, or through our part in the transplant procedure itself. We are the catalyst—the agents of change—we make it happen. We are central to the covenant. We are the judges, forced to make anguished decisions that pit donor advocacy against the reality of short supply of a precious resource. This may seem an impossible task. Just as martyrs and saints had moments of doubt, so do we. We must provide clarity and calm in desperate situations which have no solution.... And at the times for which there is no miracle, when our best decisions are met with failure, the wrong operation, the wrong timing, the

wrong patient, our disappointment with the betrayal from a patient we expected to cherish their gift. Sometimes our patients don't appreciate their transplant; sometimes our patients are not grateful to us; sometimes the patients die. Failure is a part of our life. Transplantation transfigures the failure—the untimely death of a loved one, the diagnosis of an inexorably fatal illness—into something positive, a light that continues to shine, but sometimes transplant doesn't work.

Ayn Rand conveyed the message that life is about choice. Living requires action. Martyrs made choices, people make choices, families make choices, and so do patients. The transplant team makes choices possible. We give hope and promise a chance.

We are fortunate to be agents of change, to refine techniques and approaches that make transplantation a real live treatment that works. The mysticism and strong religious connections so apparent in the stories and art of the Middle Ages has been changed and challenged by a new reliance and appreciation of scientific discovery. The contrast of Galileo's scientific discovery with his daughter's religious commitment is a rich one. Her father suffered a kind of martyrdom while she prayed from her convent. Galileo remained faithful to his truth—foreshadowing modern science. Another quote from *Great Religions of the World*: "More and more science dominates areas once reserved for priests." If science is a new church, then we are the clergy; our researchers, the prophets.

But perhaps, we are just people trying to do our best—whose participation in the miracle of transplantation allows us a little latitude in dreaming about the angels.