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ETHICS CASE

Should Physicians Attempt to Persuade a Patient to Accept a Compromised Organ for Transplant?

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While in an administrative meeting, Dr. Calvin, chief of transplant surgery at a major academic hospital in California, receives a phone call from a regional organ procurement organization. A liver has become available for the hospital's sickest patient, Mr. Lawrence, who was recently admitted with severe complications from advanced alcoholic liver disease and encephalopathy. Knowing how severe Mr. Lawrence's condition has suddenly become, Dr. Calvin excitedly breaks away from his meeting to page other attending physicians on the transplant service and review the donor information.

They find that the available liver is not without concern: it comes from an older donor with multiple comorbidities, including obesity with a degree of fatty liver, and, most importantly, the patient passed away from cardiac failure, which results in considerable hypoxemia and free-radical damage. The risk of graft failure is significant enough for the center to classify the organ as an "extended criteria donation (ECD)." Nevertheless, the team is confident and enthusiastic about the potential for transplantation, having had extensive experience successfully transplanting similar organs. So, the team rushes upstairs to the patient's room to relay the news about an available liver.

"Mr. Lawrence!" Dr. Calvin exclaims, "We're going to save your life today! An organ has become available!"

Waking from a foggy state, exhausted, exasperated, and fearful, Mr. Lawrence tries to process everything the team is telling him about the organ and the prospective transplant surgery. "So you're saying you want to give me a damaged liver?"

His daughter, who had been sitting in a chair on the side of her father's bed, stands up to take in what is being said. "Maybe we should just wait until a better one comes along," she suggests.

Dr. Calvin reminds them that they've discussed ECD organs before, and all the risk factors in their previous conversations are present in this one. He then explains the list of

additional risk factors present and what they mean, eventually concluding that this is a calculated risk, but one they have to take.

Mr. Lawrence says, "Doc, I don't understand what you are saying," while squinting at the dense text on the consent form they just handed him with a pen, "but I trust you and want to do whatever you tell me. I'm just so overwhelmed and tired. I don't have the energy to get through something like this now—I'm so exhausted. All I want to do is cry."

The team listens patiently and intently, and Dr. Calvin tells Mr. Lawrence sternly but compassionately, "Mr. Lawrence, there is no better time to do this than now. Without this liver, you will die. This organ is a blessing."

His daughter says to Mr. Lawrence, "Well, I understand what the doctors are saying. There's no way to really know what the outcome with this organ will be, or whether a better organ will come along in time. But I'm not the one who has to go through surgery, Dad. You do. And no one can make this decision for you."

Mr. Lawrence requests more time to think about the decision.

"Mr. Lawrence," another caregiver speaks up, "The longer we wait, the worse the organ quality gets. If you don't take this liver right now, it's gone."

Commentary

Mr. Lawrence, his daughter, and Dr. Calvin have to decide how best to respond to an indecisive patient. We can imagine a few weeks ago in clinic, when Mr. Lawrence had energy and willpower to brave surgery and to attempt to regain his life. At that time, he was clear-minded and committed during clinic discussions about organs, telling Dr. Calvin that, for him, any new liver was worth the risk. Now, after several weeks in the medical intensive care unit, Mr. Lawrence is demoralized by watching hospital roommates' conditions deteriorate, poor sleep, and endless consultant visitations. His health has diminished from liver failure and advanced encephalopathy, and now he thinks differently than he did during his clinic visits. Now a potentially lifesaving organ is available for transplant and Mr. Lawrence expresses ambivalence. How ought the team led by Dr. Calvin to reconcile this patient's past and present attitudes and expressions while trying to facilitate best possible outcomes? Should Dr. Calvin and the team try to persuade Mr. Lawrence to accept this particular organ and undergo surgery?

How Ought Physicians to Help Patients Decide?

As in many [medical-ethical deliberations](#), principles of nonmaleficence, justice, respect for autonomy, and beneficence can be helpful in considering how to respond to a patient's indecisiveness [1]. Nonmaleficence tends to endorse a course of nonintervention. As Mr. Lawrence and his daughter are well aware, he might have a long,

painful, and complicated postoperative course that no one can predict. Neither is it known whether he will have the physiologic reserve to tolerate and recover from the operation. The risks and potential harms of surgery can only be avoided by not performing surgery. Even if Mr. Lawrence's course of surgery and recovery goes well, surgery will give him postoperative pain that he might not be willing to endure at this time. One might object that surgery is not subject to a principle of strict *primum non nocere*—the dictum to first do no harm—since the very act of incision requires that harm precede therapy. But, in this case, because the surgery carries significant potential for harm and Mr. Lawrence's capacity for tolerating even predictable surgical harm is unknown, the principle of nonmaleficence can be applied to support his refusal of the liver [2].

Justice is given extra consideration in transplantation, and justice prompts Dr. Calvin to try to persuade Mr. Lawrence to accept the extended criteria donation liver. Society has made special provision for organs such as this to be matched with recipients like Mr. Lawrence. Many experts have weighed the level of individual benefit these organs provide against the overall benefit of decreasing waitlist times [3, 4], and, if Mr. Lawrence fits the qualifying criteria, then in the eyes of society he has a right to that organ. Granted, there is ample evidence that the quality of the organ to which he has access will vary depending on the region in which he lives, but this is a variable beyond the scope of Dr. Calvin's influence [5]. There are limits to indecision, too, as an organ must typically be accepted within one hour of offer. If Mr. Lawrence continues to delay, the organ will be offered to the next recipient. Thus, Dr. Calvin has an obligation to press Mr. Lawrence to consent or refuse.

How to respect autonomy is particularly unclear in the case of the indecisive patient. Each patient has authority to consent or refuse, provided he or she has the capacity to comprehend and make decisions. At this point, there is no clear evidence that Mr. Lawrence lacks capacity, but it seems pathophysiology is influencing his exhaustion and indecision. It could be argued that his encephalopathy will only advance without transplant and that, interestingly, further delay of his decision could actually diminish his autonomy. Without a decision, his declining physiological status will effectively make his decision for him. After all, at an earlier time, when he was not so exhausted, and was perhaps more autonomous, Mr. Lawrence appeared to have understood the risks and benefits and chose transplant. On the other hand, his acute state should not be brushed aside. Neither should the quality of the liver. That is, if Mr. Lawrence's prior enthusiasm about the transplant was based on the assumption of an uncompromised liver, how ought this variable to be considered here? One factor to consider is that Mr. Lawrence's risk of waitlist mortality tracks his physiological decline; this risk of mortality could be mitigated by his accepting a compromised organ.

Mr. Lawrence might have been changed by his hospital experience, and his beliefs about how a transplant would work in his life might now be more pessimistic. For a man who will have to adhere to a lifelong regimen of checkups, medications, and lifestyle changes, the whole success of the transplant endeavor depends both on his genuine autonomous support and on the quality of the organ he receives. So, the team might be justified in not pushing him harder toward accepting transplant. Another important source of ethical complexity in how we regard Mr. Lawrence's autonomy is that it's not clear whether the source of his hesitation is the quality of the liver, the stress of surgery, or looming challenges of recovering from surgery.

Beneficence requires physicians to guide and advise patients, especially those who have trouble making critical decisions in urgent situations that could affect others. Applying the principle of beneficence seems to support Dr. Calvin's advocacy for Mr. Lawrence to receive a liver transplant; he has probably witnessed hundreds of patients' similar illness experiences—physical deterioration, emotional distress, and psychological doubt followed by surgery, frustrating postoperative experiences, and extended duration of life. Dr. Calvin has good reasons to reassure Mr. Lawrence that what he is experiencing and thinking now could pass with time and that ultimately he will likely be glad he received a new liver. Dr. Calvin is obligated to provide a realistic assessment of risks of transplantation surgery with this specific liver as part of informed consent. If Mr. Lawrence accepts those risks, his consent expresses his trust in Dr. Calvin's team.

However, leaning too heavily on beneficence can be problematic, too. Dr. Calvin is not omniscient, and his outcomes cannot be 100 percent positive. Dr. Calvin has an interest in seeing his patients transplanted and does everything in his power to keep his waitlists moving. If Dr. Calvin is sufficiently self-aware that his self-interest does not present a conflict of interest, applying the principle of beneficence suggests that trying to persuade Mr. Lawrence to receive the transplant is ethically permissible.

The classic Greek paradox story of the Ship of Theseus prompts us to ask, *As the boards of the ship are repaired or replaced over time and over the entirety of the hull, is it still Theseus's ship?* In Mr. Lawrence's case, as we apply ethical principles of autonomy, beneficence, nonmaleficence, and justice, how ought we best to express respect and support for Mr. Lawrence? We refer to these principles as if they are immutable, timeless, and not subject to case-specific variables. As such, many might choose to apply these principles as we have here. But these principles can suggest different courses of action based on when we apply them and whose perspective is used to apply them. In this scenario, it seems prudent to rely on beneficence as one important product of the physician-patient relationship. By virtue of their long-term relationships with the patient, Mr. Lawrence's daughter and Dr. Calvin can work with him to help him through doubt and indecisiveness. In doing so, they respect his past and present and aim toward the best possible future consistent with his best autonomous self.

How Ought Physicians to Guide Patients' Perceptions of Risk?

Another way of looking at this case is that Mr. Lawrence's indecision results from two fundamental errors committed by the transplant team that, unfortunately, are very difficult to remedy. First is allowing a misperception of extended donor criteria (EDC) liver allografts [6] and second is a loss of process and orientation of the patient as his health deteriorates.

Let us begin with the misperception of EDC. If one remembers that "donors are people and people are donors," then one should conceive of the donor pool as a continuum ranging from organs with a high probability of success through allografts with a high probability of failure. In addition to the probability of allograft physiologic failure is the risk of disease transmission that occurs throughout the donor spectrum, even from donors thought to have little disease transmission potential.

The US donor population is not necessarily always healthy, so limitations to organ donation favor causes of ischemic encephalopathy that are often associated with high-risk behaviors. This point must be stressed early in the candidate's educational process, as once allografts are stigmatized, it introduces uncertainty for the candidate about whether to wait for a better organ. This decision has been widely studied [7], and the optimal outcome has always been to utilize an allograft deemed appropriate, from a clinical point of view, by the transplant surgeon [8].

Allocation calculators have been developed to begin estimating risk of organ failure [9]; however, these calculators have been derived from a recipient database that does not integrate multiple factors associated with poor organ function [10]. Hence, further refinement of these calculators is stalled until the development of a national *donor* database. Ideally, discussions regarding allocation, the US donor pool, and organ acceptance criteria should occur *prior* to listing so that the listing process reflects acceptance of the inherent risks of donation.

This leads to the second critical error by the transplant team: not providing continuing education during the candidate's progress towards transplantation. Initial discussions as to the appropriateness of allografts and the composition of the US donor pool require continual review within the context of the candidate's physiology. As our patient deteriorates, his or her need for a lifesaving transplant increases. The need for increased access to allografts should be met through [expansion of donor selection criteria](#) (i.e., higher tolerance for allograft failure). The interplay between access and risk requires constant reinforcement by the clinician to prepare the candidate for an impending organ offer and to emphasize their need for immediate transplantation. Made correctly, organ offers can be welcomed by the candidate, regardless of the donor's background, and may be overwhelmingly accepted following a discussion of the risks with the transplant

surgeon. Ultimately, transparency, education, and reinforcement form a foundation of trust between the transplant team and candidate.

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