

What prospective kidney donors need to know

BY Katie Charles

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THE SPECIALIST: DR. MICHAEL EDYE ON KIDNEY TRANSPLANTS

An adjunct associate professor of surgery, Michael Edye of Mount Sinai has been performing about six surgeries a week for the past 20 years. Over the course of his career, Edye has done about 600 kidney-donation surgeries.

WHO'S AT RISK:

The kidney was the first human organ to be successfully transplanted, in 1954. "There are about 5,000 kidney donations done a year in the U.S.," says Edye. "People can live very acceptably on one kidney, so living donors can choose to give one of their two kidneys to a person with end-stage renal disease." Renal failure is most often caused by chronic conditions like high blood pressure, diabetes and lupus, though it can also be caused by drugs taken for other diseases.

Traditionally, kidney donors are friends or immediate family members of the person in need of a transplant. But people looking to give one of their kidneys to a stranger are increasingly common. "More and more these days, we're finding altruistic donors, who want to give a kidney to somebody, anybody," says Edye. "They'll put an ad in the newspaper, or go through their church or community group. It's astounding."

In the world of transplants, kidney donation is a relatively easy operation, and many donors will never feel the loss of their second kidney. "It's the most expendable of organs," says Edye. "So giving up a kidney causes no disadvantage to your long-term health." In fact, studies have shown that kidney donors actually live longer than the general population — because donors come from a pool of people in good health. A donor must be a blood match and antibody match with the person who will receive the kidney.

CRITERIA FOR DONATION:

Donors must be in good health. "We like them not to have high blood pressure or diabetes, though it doesn't matter if they've had prior surgery," says Edye. "We prefer donors who are between 18 and 65 years old, though we have gone higher than that for an older recipient, if the older donor is in good health."

Doctors also take into consideration whether the donor is overweight. "Most transplant units will not go ahead with a donation from donors with a BMI [body mass index] over 35," says Edye. That stipulation can end up benefiting the donor. "Overweight donors who are told to lose weight, often do — more effectively than the average patient told to lose weight. They're extremely motivated."

Another key requirement is that they cannot be paid for their organs. "It's illegal to sell organs," says Edye, "And all donors are asked if they're receiving any material benefit from the donation. They all deny they are, and probably 98% are telling the truth."

TRADITIONAL TREATMENT:

As of about five years ago, most donation surgeries started to be done laparoscopically, reducing hospitalization from five or six days to one or two nights. "It's revolutionized the way we deal with the donor," says Edye. "It removes the big incision that people used to get in their ribs, to a small incision like a C-section incision. They have very little pain afterwards."

The process of screening donors to make sure that they are healthy and compatible with the recipients takes about six months. By the time surgery rolls around, all the donors need to do to prepare is abstain from eating for eight hours beforehand. "We use scanning to estimate the size of the kidney," says Edye. "And if there is a large discrepancy in size, which there often is, we leave the larger kidney for the donor."

Patients are positioned on their side, and the surgeon operates in the belly cavity. "We put skinny laparoscopic

instruments in close to the rib cage," says Edye. "We free up the kidney — but we don't detach it until the very last minute, because the kidney deteriorates when you detach it from its blood supply." Meanwhile, the recipient is being prepared.

When surgeons are 100% sure he or she is ready, they remove the kidney. After checking for bleeding, the doctor closes the incision and takes the donor to the recovery room for careful monitoring overnight. "Usually, by the next day, they can walk around and eat," says Edye. "Seven percent of patients go home within 24 hours."

RESEARCH BREAKTHROUGHS:

One of the most astonishing breakthroughs in kidney donation is a mixture of old-fashioned altruism and Internet technology. "It started with the idea of two cases of donor/recipients who weren't compatible, where they found the donor was compatible with a completely different recipient. So they swapped," says Edye. Such swaps weren't feasible before the Internet. Now that more people are giving altruistically, the so-called "daisy chains" are even more effective. "You can start off the daisy chain with an altruistic donor who gives to a complete stranger, and the relative of that recipient who would be their donor but isn't compatible gives to another recipient," says Edye. "You can have chains lined up with six or seven donations."

QUESTIONS FOR YOUR DOCTOR:

If you've decided to donate your kidney, ask the surgeon, "**How experienced are you at this operation?**" Edye recommends that patients seek out surgeons who have done at least 50 operations. "The surgeon should be doing a donation every few weeks," Edye reasons. A good second question is, "**What problems have you had in the past?**" Kidney donation is a delicate operation, with two lives hanging in the balance. A good place to start is by asking your nephrologist for a referral, and following up by researching the reputation of the transplant center.

WHAT YOU CAN DO:

Get informed. The [United Network for Organ Sharing](#) oversees transplant policy in this country, and its Web site (unos.org) is full of information, like how many people are on the waiting list for organs (more than 100,000). It has a section dedicated to providing living donors with information and support.

Use painkillers moderately. "Long-term use of analgesics like aspirin, [Tylenol](#) and [Advil](#) can damage the kidneys," says Edye. Doctors don't advise patients to avoid these drugs entirely, but to use them in moderation.

Find a topnotch transplant center close to home. Proximity matters, because you'll need to be closely monitored after the transplant. "It's better that your followup is done by the team that helped you in the first place," says Edye.