# The fight for kidney healt

Early treatment and lifestyle changes are vital, but transplants offer hope in critical cases

#### The specialist: Dr. Jon Bromberg

As surgical chief of the Transplantation Institute at Mount Sinai Hospital, Dr. Jon Bromberg oversees more than 300 abdominal organ transplants a year. He also runs a lab doing immunology research.

#### ▶ Who's at risk:

Kidney transplants are a treatment for people who have kidney failure, an increasingly common problem in American society.

"High blood pressure, diabetes, obesity, an aging population and all of those things together are the factors that account for most kidney failure," says Bromberg. "As people get older and fatter and more hypertensive, we'll see more kidney failure."

High blood pressure and diabetes both cause scars on the cells of the kidney, and over time the cells become damaged and abnormal. In both cases, kidney deterioration is easily preventable. "If you take your meds and modify your lifestyle," says Bromberg, "you can make the disease virtually go away and be well-controlled. Or you can progress on to these complications."

Certain ethnic groups are much more likely to develop kidney failure: African-Americans, Hispanics and South Asians may have as much as twice the risk as Caucasians and East Asians. "Presumably there is a genetic component, but we don't know exactly what it is yet," says Bromberg. "In some families, virtually everyone has high blood pressure, diabetes and renal [kidney] disease."

#### Signs and symptoms:

Most people have no idea they have kidney disease or kidney failure while it is in the early stages. "It's only when it becomes extremely severe that they start showing symptoms," says Bromberg. At that point, people oftenfeel extremely tired and lethargic, symptoms that are easily mistaken for depression. "They feel so poorly, they can barely get out of bed," says Bromberg, "Often they're retaining fluid, so you see swelling of the feet and ankles." By the time these symptoms get patients to the doctor. kidney failure may have progressed to the point where they need to go right to dialysis.

Doctors stress the importance of regular screening to catch kidney disease and its risk factors in the early stages. Fortunately, it is easy and cheap to screen for these problems by checking blood pressure and having blood and urine tests.

## ▶ Traditional treatment:

Patients who have kidney failure are treated with a variety of drugs along with renal replacement therapy, such

### ▶ What you can do:

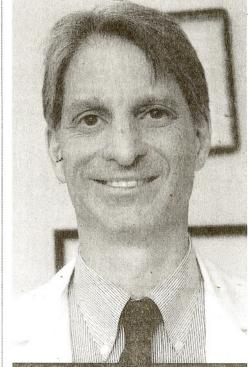
# Control your blood pressure, diet and weight.

If you are on medication for high blood pressure, you should have your pressure checked every month. 'You can check it yourself with a blood pressure cuff, or go in to the doctor," says Bromberg.

#### Know your family history.

"If you have a lot of family members with high blood pressure or kidney disease," says Bromberg, "that's something you should go to get checked." Be an organ donor.

For more information about what transplant means, check www.ustransplant.org or the United Network for Organ Sharing at unos.org.



Dr. Jon Bromberg of Mount Sinai Hospital says first symptoms of a problem include extreme tiredness.

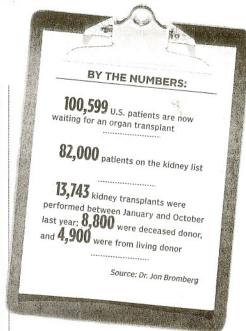
as dialysis or a transplant. Dialysis works to filter harmful wastes, salts and fluids from the blood, thus replacing part of the kidney's function.

There are two forms of dialysis — hemodialysis and peritoneal dialysis. The most common treatment is hemodialysis, in which a patient is connected to a machine three times a week. In peritoneal dialysis, a catheter is permanently inserted into the abdomen, where it acts like a kidney by removing waste products.

Dialysis remains the most common treatment for kidney failure, but it carries significant risks. Kidney patients on dialysis have a 10%-20% annual mortality rate. "That's for everyone: young, old, fat, thin, all different races," says Bromberg. "That's a really high mortality rate - it's comparable to having lung cancer." The other downsides to dialysis are that it doesn't always work, it increases the risk of heart attack or stroke, and it increases the risk of infection.

The other option is a transplant. "Kidney transplantation is far and away more successful than dialysis," says Bromberg. "The mortality rate is 1%-2% the first year, and less than 1% after that." Five to 10 years after a transplant, 70%-80% of patients are still alive with functioning transplants. A kidney transplant is the best option for many patients, but not for those who are extremely elderly, have severe heart or lung disease, or have life-threatening diseases like metastatic cancer.

There are two kinds of kidney transplants: a deceased donor transplant, where the kidney comes from a cadaver, and a living donor transplant, where the kidney comes from



a relative, friend or community member, "We recommend a living donor transplant to everyone," says Bromberg. "A healthy friend or family member is ideal." Living donor transplants are preferable because the kidney is only outside the body for 30 minutes. Cadaver kidneys are often outside the body at least 6-12 hours.

The good news is that kidney donors do extremely well afterward. A study in the New England Journal of Medicine tracked donors for 40 years, and found that they actually do better than the general population, probably because they are highly motivated patients and very healthy.

Unfortunately, organ availability can't keep pace with the demand. "Eighty-two thousand people are waiting for a cadaver kidney," says Bromberg. "In New York, the wait is four to seven years. Fifty percent of patients will die while waiting for a kidney.'

### Research breakthroughs:

Doctors are improving the system that matches donors and recipients. "A few places around the country, including Mount Sinai, participate in swap programs," says Bromberg. "If you have donor A and recipient A, we use computers to set up programs to maximize the matches across the country." These are also called paired donor exchange programs. "That's helped increase a little bit the number of transplants."

Doctors are also finding ways to use new drugs and older ones to help patients be eligible for a transplant. For instance, in some cases a potential recipient would have an antibody against the donor. "We now have medicines that overcome the antibody," says Bromberg.

# Questions for your doctor:

Ask your doctor if you have factors that contribute to kidney disease: "Do I have high blood pressure or diabetes?" If the answer is yes, ask, "Could I be developing kidney disease?" Your doctor can easily perform tests to get the answer. •

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