MedicalXpress

Transplant surgeons fear using organs from 'High-Risk' donors, despite safety record

January 19 2011

As a response to a 2007 episode in which four patients in Chicago were transplanted with organs from a single donor unknowingly infected with HIV -- the only such episode in 20 years -- one-third of transplant surgeons in the United States “overreacted” and began routinely using fewer organs from high-risk donors, new research from Johns Hopkins finds.

In a study appearing in the January issue of the journal Archives of Surgery, Johns Hopkins researchers say many surgeons are shunning use of such organs instead of searching for ways to put in place more safeguards that would protect and inform recipients, but make maximum use of scarce organs.

“These organs help people and the risk of contracting an infectious disease from them is very small compared with other risks in transplantation,” said Dorry L. Segev, M.D., Ph.D., associate professor of surgery at the Johns Hopkins University School of Medicine and the study’s leader. “There is ample evidence that many patients are better off receiving organs from high-risk donors than waiting for a different organ, but that’s not what’s happening in many transplant centers.”

Donors considered by the U.S. Centers for Disease Control and Prevention to be at high risk for infection include intravenous drug users, men who have sex with men and prostitutes. They comprise nearly 10 percent of organ donors in the U.S. and are tested for HIV and other infections before their organs are approved for transplantation. But,

Segev says, the tests sometimes, as in the Chicago case, don't find the infection.

Transplant experts believe the Chicago case occurred when the deceased donor's HIV infection was too recent to show up on the screening tests administered before transplantation. Four patients at four different Chicago-area hospitals received contaminated organs and were later diagnosed with the virus.

For the current study, Segev and his colleagues performed a national survey of 422 transplant surgeon use of, and attitudes toward, organs from high-risk donors before and after the 2007 transmission.

Among the changes that came about after the Chicago episode, the survey found, was the use by some surgeons of new consent forms that explained the risks presented by high-risk donor organs or counseling sessions that emphasized the risk. For example, some consent forms now highlight the limitations of blood tests, which can't catch every HIV infection, notably those that are recent.

Segev characterizes 76 percent of the changes made by surgeons after the highly publicized disease transmission as "defensive medicine," which he calls worrisome because high-risk organs have been shown to provide significant survival benefit to transplant recipients and a very small risk of infection transmission. Doctors should make efforts to protect and inform patients, he says, but not avoid the use of these organs to such a large degree.

He says surgeons may be backing off from use of high-risk organs because they are afraid of being sued or anticipate pressure from regulators. "The litigious and regulatory environment we're currently in is not acting in the best interests of patients, and may actually harm patients," Segev says.

Segev and his colleagues also found that 16.7 percent of surgeons reported increasing their use of nucleic acid testing (NAT) that shortens the window for diagnosing a new infection from 22 days to nine days for HIV and from 59 days to seven days for hepatitis C. Such testing would have prevented the transplantation of the Chicago donor's organs.

The Johns Hopkins Hospital performs NAT on organs from all high-risk donors. The hospital closely monitors recipients of such organs after transplant to start anti-viral therapy immediately in the unlikely event that an infection could occur, Segev says. He adds that NAT is not the national standard.

Provided by Johns Hopkins University