

Roundworm infections threaten organ recipients

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CDC reports on three patients who were sickened by infected donor.

(HealthDay)—Three people who received transplant organs in 2012 from the same 24-year-old donor got more than they bargained for: Each developed a severe roundworm infection, U.S. health officials reported Thursday.

The transplant recipients acquired *Strongyloides*, an infection caused by an intestinal parasite common in the tropics and subtropics known as *S. stercoralis*. The infection apparently was transmitted from the donated organ to the recipients, according to a report from the U.S. [Centers for Disease Control and Prevention](#).

The discovery could lead to new guidelines for organ transplantations, the report suggested. Doctors currently recommend screening recipients for *Strongyloides* if they come from areas where the [parasitic worms](#) are widespread, but this report suggests a need to screen donors as well.

"Donor-derived *Strongyloides* infection might be more common than previously believed," the CDC report said. "In these investigations, a single donor was the source of infection for three of four [organ recipients](#)."

If screening identifies donor infection, [preventive treatment](#) of vulnerable recipients can begin, the CDC said in its April 12 *Morbidity and Mortality Weekly Report*. Organ recipients are at high risk of serious infection because of the immune-system-suppressing drugs they take to fight rejection of their new organ.

Among healthy people, the roundworm infection can present no symptoms, but experts believe the [immunosuppressive therapy](#) might reactivate chronic infection in the transplanted organs.

The donor in this case died of [gunshot wounds](#). The next day, his heart, kidneys, pancreas and liver were transplanted into four recipients. The donor was born in Puerto Rico and often visited there, but at the time of donation *Strongyloides* was not suspected. That's probably because most cases in North America are seen in people who have visited or lived in South America or Africa, the CDC report said.

One of the recipients, a 64-year-old man, developed severe nausea, loss of appetite and abdominal swelling nine weeks after receiving a pancreas and kidney. Stool samples, urine samples and biopsies uncovered *S. stercoralis*—both adult worms and larvae.

Doctors then followed up with a 14-year-old kidney recipient 10 weeks after his transplant and found he had a fever, rash, loss of appetite, nausea, vomiting and diarrhea. Testing revealed that he, too, had the roundworm infection.

Both recovered after treatment with antiparasitic medications.

But a heart recipient who was found to have *S. stercoralis* larvae in his respiratory system died 11 weeks after his transplant. The CDC report didn't state, however, that the infection caused the 59-year-old's death. The liver recipient, 66, also died, but an autopsy showed no signs of the parasitic infection.

Besides donor screening for *Strongyloides*, the CDC recommended improved communication to protect transplant patients.

"Rapid communication among transplant centers and organ-procurement organizations is also vital to protect organ recipients when there is a concern for disease transmission," the report stated.

More information: The U.S. National Library of Medicine has more about [*Strongyloides*](#).

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