

Organ Transplants Can Spread Cancer

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ASSOCIATED PRESS (no date)—Five patients who developed skin cancer after an organ transplant may have received cancer seed cells from the donor. This was the finding of a team of researchers in Modena, Italy.

The cancer, Kaposi's sarcoma, is caused by a virus that the body usually can eliminate. It has become associated with the AIDS epidemic because the virus affects people with weakened immune systems.

Kaposi's sarcoma appears in about one out of every 200 transplant recipients—which is 400 to 500 times the rate of the general population.

It had been thought the virus was able to take hold in these patients because their immune systems were suppressed in order to prevent rejection of the new organ.

But that European research team has found evidence that, at least in some transplant patients, seed cells for the cancer tumors seem to have originated in the organ donor.

The findings of the team (led by Patrizia Barozzi and Mario Luppi of the *University of Modena and Reggio Emilia* in Modena, Italy) have been reported in medical journals.

The study shows that “tumor cells from the organ donor can contribute to one of the most frequent transplant-related malignancies,” Patrick S. Moore of the University of Plattsburgh Cancer Institute commented. He was not part of the research team.

Several weeks earlier, Scottish physicians reported on two cases of patients developing melanoma (the skin cancer) from transplanted kidneys, even though the donor was success-

fully treated for the cancer many years earlier.

Transfer of cancer from a donated organ to a transplant patient is rare; and the chances of it happening long after the donor was treated for the condition is thought to be extremely unlikely.

In the cases involving Kaposi's sarcoma, researchers studied eight patients—six women and two men—who received kidneys from male donors and who developed Kaposi's sarcoma nine months to 40 months later.

In analyzing the cancer cells from the women, the researchers detected Y-chromosome DNA in four cases, indicating the cells originated with a man. There was no evidence of Y-chromosomes in the cancer in the other two women or in normal cells from any of the women. These facts are considered highly significant.

Using the DNA analysis of the cancer cells in the men, the researchers discovered that in one case the cancer DNA was related to that of the organ donor.

Kaposi's sarcoma can be treated by reducing or ending the suppression of the patient's immune system, allowing it to battle the cancer.

That also can mean the immune system will begin attacking the transplanted organ, causing it to be rejected.

Dr. Moore made note of the fact that the organ donors had no symptoms of Kaposi's sarcoma. This suggests that they are infected with the cancer-causing virus, but that their bodies are able to destroy the cancer cells when they form.

However, once the infected organ is transplanted into a patient who has a weakened immune system, the cancer cells are able to grow and cause the disease.