Head and neck cancer in transplant patients: For better or worse?
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Transplant patients who develop head and neck cancer are more likely to be non-smokers and non-drinkers, and less likely than their non-transplant counterparts to survive past one year of diagnosis, according to a new study from Henry Ford Hospital in Detroit.

As part of a 20-year review, Henry Ford researchers found cancers of the throat, tonsils and mouth may be more aggressive in transplant recipients as the result of long-term immunosuppressive therapy required to prevent solid organ rejection.

Transplant patients in the study who developed skin cancer in the head and neck region were more likely to have multiple lesions, compared to the general public. In all, 2.6% of transplant patients in the study developed some form of head and neck cancer.

While the risk for developing head and neck cancer is small, the study serves as an important reminder to all transplant recipients to be vigilant about any changes to their skin, as well as persistent sore throat, ear pain or swallowing issues - all signs of head and neck cancer.

"The benefits of organ transplantation and immunosuppressive therapy still outweigh the risk of transplant patients developing head and neck cancer," says study author Robert Deeb, M.D., with the Department of Otolaryngology-Head & Neck Surgery at Henry Ford.

"Still, our study highlights that head and neck cancer arising in transplant patients warrants the need for regular screenings and aggressive treatment."

The study will be presented Jan. 28 in Miami Beach at the annual Triological Society's Combined Sections Meeting.

More effective immunosuppressive therapies for transplant patients have greatly improved graft and recipient survival rates. But with longer survival, there has been an increase in long-term complications from immunosuppression, including head and neck cancer.

In fact, head and neck cancers account for 4 percent to 6 percent of all post-transplant malignancies.

The challenge is that transplant patients who develop head and neck cancer may have to consider forgoing immunosuppressive therapy in order to treat the cancer. But halting immunosuppression could lead to organ failure, leaving patients with a very difficult decision: treat the cancer or save the organ. Transplant patients with most forms of skin cancer typically do not need to stop immunosuppressive therapy.

To gain a better understanding of post-transplant head and neck cancer, Dr. Deeb and Vanessa G. Schweitzer, M.D., conducted a comprehensive review of the 3,639 transplants that took place at the Transplant Institute at Henry Ford Hospital from January 1990 through December 2011.

Using electronic medical records, the researchers were able to track the incidence of head and neck cancer following solid organ transplantation during a 20-year period.

During that period, 95 transplant patients developed head and neck cancer - 78 had cutaneous (skin) cancer and 17 had non-cutaneous cancer.

For the 78 patients who developed skin cancer, the most common sites were the cheek and scalp. More than half of the patients were diagnosed with multiple skin malignancies in the head and neck region. The average age at cancer diagnosis was 61, and the mean time between transplant and skin
cancer diagnosis was 48 months.

Seventeen patients in the study developed cancer in the upper aerodigestive tract (mouth, tongue and throat) post transplant. For this group, the average age at diagnosis was 60 and the mean time from transplant to cancer diagnosis was 66 months.

Among these patients, significantly fewer were alive at one year compared to their non-transplant counterparts, regardless of cancer stage at diagnosis.

The upper aerodigestive tract cancer patients also were more likely to be non-drinkers and non-smokers. An interesting finding, notes Dr. Deeb, since the majority of head and neck cancers in non-transplant patients (75%) are the result of alcohol and tobacco use.

"That our study group had a much lower rate of smoking and/or alcohol use than non-transplant patients strongly suggests the role of immunosuppression in the development of head and neck cancer," says Dr. Deeb.

More information: Study abstract is available online at [www.triological.org/pdf/2012Se ... tionsProgramLong.pdf](http://www.triological.org/pdf/2012Se ... tionsProgramLong.pdf)

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