Disparities among Patients with Extremity Soft-Tissue Sarcomas

Atlanta 2008/01/22 - A new study reveals significant racial and ethnic differences in the treatment and survival of patients with soft-tissue sarcomas, a rare but dangerous cancer that begins in muscle, fat, blood vessels or other supporting tissue of the body. The findings are published in the March 1, 2008, issue of CANCER, a peer-reviewed journal of the American Cancer Society.

While racial and ethnic disparities in treatment and disease outcomes have been reported for various cancers, this is the first study to address disparities in extremity soft-tissue sarcomas. Extremity soft-tissue sarcomas affect approximately 9,220 patients in the United States, more than half of which are estimated to involve an upper or lower extremity.

Preserving limbs with surgery is the accepted standard treatment for adult extremity soft tissue sarcomas. Amputation is seldom necessary because radiation therapy, given either before or after surgery, can effectively preserve limbs in up to 91 percent of cases. However, the research showed that this doesn’t always happen for all patients.

Utilizing a database of the National Cancer Institute, Dr. Steve R. Martinez, a surgical oncologist with UC Davis Cancer Center and lead author of the study, and Dr. Anthony S. Robbins of the California Cancer Registry, mined the Surveillance, Epidemiology and End Results (SEER)-Medicare database and identified adult patients in the United States with extremity soft-tissue sarcomas who were diagnosed and treated between 1988 and 2003. Eligible patients included 4,636 whites, 663 blacks, 696 Hispanics and 411 Asians. Comparisons of treatments and survival were then made for each population.

The authors found that blacks had significantly lower rates of surgeries that would have saved their arm or leg, they had the highest rates of amputations, and they were the least likely to receive additional treatments that would lead to improved survival. The study found when compared with whites, blacks had a 39 percent higher death rate related to their disease, even when taking into account various factors known to influence sarcoma-specific survival.

In their analysis, the researchers also found that Hispanics tended to be diagnosed with extremity soft-tissue sarcomas at a younger age than whites, blacks, and Asians; blacks, Hispanics, and Asians tended to have larger tumors than whites; Asians were most likely to undergo limb-sparing procedures, and had the lowest rates of amputation; and Hispanics had lower rates of limb preservation and higher rates of amputation when compared with whites.

Martinez said that the study does not address the reasons for the different outcomes for patients with the same disease, but added that his study should be a wake-up call for physicians treating soft-tissue sarcomas.

“We need to take a close look at the factors that lead to worse results for one population when compared to others,” he said. “And we need to focus our efforts toward improving extremity soft-tissue sarcoma treatment and outcomes for all patients, especially for those most at risk.”

Article: “Racial and Ethnic Differences in Treatment and Survival Among Adults With Primary Extremity Soft-Tissue Sarcoma” Steve R. Martinez, Anthony S. Robbins, Frederick J. Meyers, Richard J. Bold, Vijay P. Khatri and James E. Goodnight. CANCER; Published Online: January 22, 2008 (DOI: 10.1002/cncr.23261); Print Issue Date: March 1, 2008.

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