Leukemia Mortality Linked to Prior Skin Cancer

BY CHARLES BANKHEAD

PRAGUE — A prior diagnosis of nonmelanoma skin cancer predicts an increased mortality risk in patients with chronic lymphocytic leukemia, investigators from the National Cancer Institute reported.

Overall, chronic lymphocytic leukemia (CLL) patients with a history of nonmelanoma skin cancer had a 30% greater risk of death, which almost doubled in the subgroup of patients with a prior diagnosis of squamous cell cancer, said Patrick Blake, a medical student at the Cleveland Clinic who is on leave at the NCI.

In one-third of the CLL cases, a diagnosis of nonmelanoma skin cancer preceded the leukemia diagnosis by less than 1 year, increasing to 44% for squamous cell cancer.

"CLL patients with a previous diagnosis of nonmelanoma skin cancer have a significantly decreased survival, compared with CLL patients without nonmelanoma skin cancer," Mr. Blake and colleagues reported during a poster session at the International Congress of Dermatology.

"Our investigation has unique new findings and expands the findings of two previous studies that found increased mortality among lymphoma patients with a prior history of skin cancer," he said.

Several case reports have documented incidental identification of subclinical CLL related to excision of squamous cell or basal cell skin cancer. A Scandinavian study of patients with squamous cell skin cancer demonstrated a twofold increased risk of CLL.

Two recent studies documented increased mortality in lymphoma patients with a history of skin cancer. However, investigators in both studies included CLL patients with those who had non-Hodgkin's lymphoma.

To clarify the link between CLL and nonmelanoma skin cancer, NCI investigators analyzed data from a population-based study of more than 12,000 cases of CLL diagnosed in Sweden between 1973 and 2003.

The 5-year survival of chronic lymphocytic leukemia patients without a history of skin cancer was 43%, compared with 31% for patients with a history of nonmelanoma skin cancer.

Complete medical history was available for the CLL patients, and cause of death was ascertained by data from Sweden's national death registry.

The NCI investigators identified 236 CLL patients with a prior diagnosis of nonmelanoma skin cancer, compared with 11,805 patients with no history of skin cancer.

CLL patients with a history of nonmelanoma skin cancer were:

- Older (78.5 years vs. 71 years);
- Substantially more likely to be age 70 or older at diagnosis of CLL (80.9% vs. 54.1%);
- More likely to be male (69.9% vs. 62%);
- And diagnosed more recently (1993 vs. 1984).

Among the 236 CLL patients with a history of nonmelanoma skin cancer, investigators found that 80 (34%) had a skin cancer diagnosis less than a year before the CLL diagnosis. Of 111 patients with squamous cell skin cancer, 49 (44%) had a skin cancer diagnosis less than a year before the CLL diagnosis.

CLL patients with a prior diagnosis of nonmelanoma skin cancer had a mortality hazard ratio of 1.29, compared with CLL patients who did not have a prior skin cancer diagnosis. In the subgroup of patients who had squamous cell skin cancer, the CLL mortality hazard ratio increased to 1.86. Both of these findings differed significantly from those of the patients with no history of skin cancer ($P < .0001$).

The 5-year survival of CLL patients without a history of skin cancer was 43%, compared with 31% for patients with a history of nonmelanoma skin cancer and 28% for the subgroup with squamous cell cancer ($P < .0001$). ■