Study Finds Advantage for African Americans With Multiple Myeloma

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In a surprising rebuttal of previous findings, a new study shows that African Americans with multiple myeloma have an overall higher survival rate than Caucasians with the disease when all patients have equal access to cutting-edge therapies. The results raise questions about the biology of this type of cancer.

Multiple myeloma, a cancer that arises in plasma cells, a type of white blood cell, is more common in African Americans, and previous research has shown that African Americans fare relatively poorly in terms of survival. Some recent studies have suggested that this disparity is because African Americans may have less access to novel therapies and stem cell transplants than Caucasians.

The study, led by Nikhil Munshi, MD, and Nathanael Filmore, PhD, of Dana-Farber and Boston VA Healthcare System, drew on data from the Veterans Administration (VA) health care system, where economic and demographic differences that could influence treatment decisions were minimized. The report, published in the journal Blood, examined outcomes of 8,845 Caucasian patients and 3,254 African Americans treated in the VA facilities nationwide.

The analysis showed that the median overall survival was 5.07 years for African Americans and 4.52 years for Caucasians. The survival difference was most significant in younger patients: median overall survival for those under 65 when diagnosed was 7.07 years for African Americans and 5.83 years for Caucasians. For patients over 65, overall survival was roughly equal in the two ethnic groups — 3.60 years for African Americans and 4.04 for Caucasians.

“What was unique in this study was that in the VA, everybody is equal, and everyone gets the same access to drugs,” says Munshi, senior author of the study and director of Basic and Correlative Science in the Jerome Lipper Multiple Myeloma Center at Dana-Farber. “What we found extremely surprising was that African American patients had significantly superior survival to the Caucasian population.”

The investigators determined that members of both ethnic groups received novel agents such as
immunomodulatory or proteasome inhibitor drugs at the same rate.

“These results suggest that in the VA system, with lack of significant racial differences in utilization of novel therapies or stem cell transplant, overall survival may be superior in African American patients, particularly the younger population,” the authors say.

The disparities in survival seen in previous studies are likely to have resulted from socioeconomic factors favoring Caucasians.

More questions to answer

The survival advantage for African Americans found in the current study “also raises an important question about possible differences in disease biology,” the investigators explain. Why is it that there is a two-fold higher incidence of myeloma in African Americans, yet when treatment access is equalized, they have superior survival to Caucasians?

“The point we’re making is that if African Americans do better, maybe that adds to the evidence that they have a genetically different disease,” adds Munshi.

As for the important message of the study, he says, “it is that equal access to treatment is the key.”

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