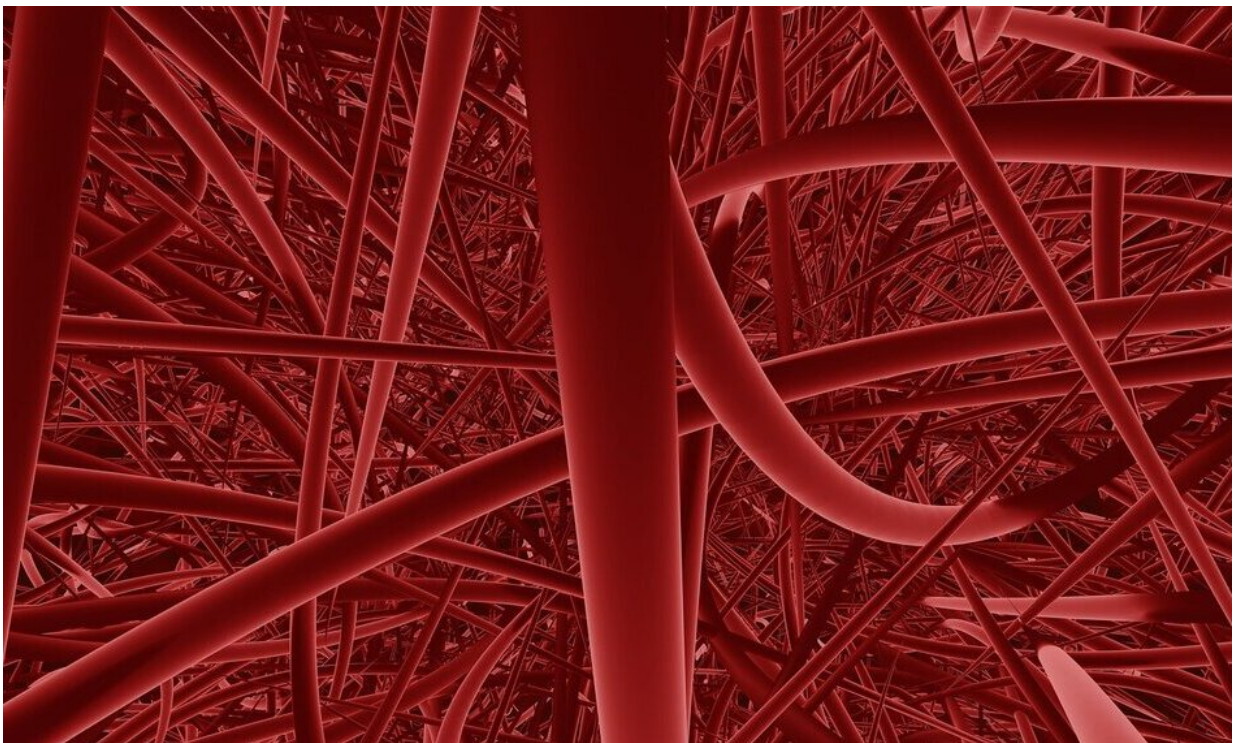


Black men found to have greater microvascular dysfunction than white men after prostate cancer diagnosis

April 8 2024



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Microvascular function is lower in Black men following a recent diagnosis of prostate cancer, compared to white men, according to researchers at the Medical College of Georgia. Researchers presented their work at the [American Physiology Summit](#) in Long Beach, California, held April 4–7.

It is widely documented that racial disparities exist in prostate cancer outcomes. The purpose of this study was to comprehensively assess [vascular health](#) in Black and [white men](#) who were within three months of prostate cancer diagnosis. In this case, researchers examined 28 men who were newly diagnosed with prostate cancer (10 white and 18 Black).

They evaluated vascular health by measuring large blood vessel function (brachial artery dilation), small blood vessel function (microvascular blood flow) and arterial stiffness. The researchers determined the Black men had significantly lower microvascular function compared with their white counterparts. Impaired microvascular function often is an early sign of heart disease risk.

The Black men in this study were four years younger than the white participants. The age difference suggests that microvascular dysfunction might also accelerate vascular aging and contribute to racial disparity in [cardiovascular disease](#) following a prostate cancer diagnosis.

Researchers hope these findings lead to new treatments to help eliminate the racial disparity and improve prostate cancer outcomes between Black and white men. "Understanding how race impacts the time course of vascular health following diagnosis of [prostate cancer](#) will lead to more effective therapeutic strategies to reduce the cardiovascular burden associated with cancer," said Abigayle Simon, a medical student at the Medical College of Georgia and lead author of the study.

Provided by American Physiological Society

Citation: Black men found to have greater microvascular dysfunction than white men after prostate cancer diagnosis (2024, April 8) retrieved 20 May 2024 from <https://medicalxpress.com/news/2024-04-black-men-greater-microvascular-dysfunction.html>

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