Androgen deprivation therapy and cardiovascular disease: what is the linking mechanism?

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Abstract
The past decade has brought increased awareness of the potential adverse effects of androgen deprivation therapy (ADT) in men with prostate cancer. Arguably the most important and controversial of these is the increased risk of cardiovascular morbidity and mortality. Although multiple observational studies have shown that men treated with ADT are at increased risk of developing atherosclerotic cardiovascular disease, our understanding of the biological mechanisms that might underlie this phenomenon is still evolving. In this review, we discuss some of the mechanisms that have been proposed to date, including ADT-induced metabolic changes that promote the development and progression of atherosclerotic plaques as well as direct local effects of hormonal factors on plaque growth, rupture and thrombosis.

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castration | metabolic syndrome | prostate cancer