

First report of increased safety using simultaneous techniques for cardiac testing published

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Canadian Journal of Cardiology has published a paper on the safety of cardiac imaging methods. This study is important for patients worried about radiation exposure during X-ray based studies of the heart. X-ray based methods have greatly improved the diagnosis of heart disease, but they can produce significant levels of radiation exposure.

New imaging methods offer the possibility of much safer external investigations for conditions that in the past required potentially dangerous probes within the body (like wires or tubes within blood vessels). One example is high-definition CT scans to look at the arteries of the heart and diagnose [coronary artery disease](#). However, such procedures have required [radiation levels](#) that could themselves be potentially dangerous. Dr. Heydari et al. provide the first report of high-definition CT scans with the simultaneous application of several techniques to reduce the level of radiation to much safer values.

In an accompanying editorial in the same issue of *Canadian Journal of Cardiology* titled, "Cardiac Computed Tomography and Risks of [Radiation Exposure](#): How Low Can We Go?", Paul Galiwango, MD, commented that although the study has limitations, the results demonstrate that reduction techniques are feasible and should be adopted whenever possible. They offer the challenge, "Do we need to go even lower?"

"Previous studies have shown that radiation exposure during cardiac diagnostic tests can increase [cancer risk](#). This paper reports how various new methods can be applied to reduce radiation exposure during cardiac diagnostic tests by about 75-85%. The procedures they describe can greatly reduce patient risk," comments Stanley Nattel, MD, Editor-in-Chief of *Canadian Journal of Cardiology*.

More information: The paper is "Diagnostic Performance of High-Definition Coronary Computed Tomography Angiography Performed With Multiple Radiation Dose Reduction Strategies," by Bobak Heydari, MD, Jonathon Leipsic, MD, G.B. John Mancini, MD, James K. Min, MD, Troy LaBounty, MD, C. Taylor, MD, Gabriela V. Cohen Freue, PhD, and Brett Heilbron, MD ([doi:10.1016/j.cjca.2010.12.026](https://doi.org/10.1016/j.cjca.2010.12.026)). It appears in *Canadian Journal of Cardiology*, Volume 27, Issue 5 (September 2011)

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