

Cancer risk from cardiac CT overstated: researchers say

November 10 2008

Radiology and cardiovascular researchers from the Medical University of South Carolina in Charleston, S.C., today presented new data that shows the risk of cancer from exposure to radiation during computed tomography for cardiovascular disease has been overstated and that new estimates are several times lower than previously published conclusions. The MUSC researchers presented their findings at the American Heart Association's meeting in New Orleans.

In previously published studies, different researchers concluded the risk of cancer from radiation exposure during CT for cardiovascular disease was approximately 1 in 114, but the new study suggests the risk is 1 in 1000.

U. Joseph Schoepf, MD, and colleagues from MUSC, claim previous studies assessing lifetime risks of cancer from radiation in cardiac CT are based on unreliable models of patients who undergo CT for cardiovascular disease.

In conducting his study, Scheopf studied 104 consecutive patients undergoing 64-slice cardiac CT at the Medical University of South Carolina. The majority of the patients were male with median age of 59 and median weight of 202 pounds. The research team converted organ radiation doses into risk using a previously published and validated measure. Patient cancer risks were adjusted taking into account patient sex, age and weight, the latter being an often neglected factor influencing radiation risk.

The new risk in this patient population, which mirrors more closely the typical patients who receive cardiac CT, was 1 in 1000, Scheopf said.

"Thus, in a real-life clinical patient group, the realistic risk of radiation induced cancer from cardiac CT is substantially lower than previously reported for general populations," Scheopf said.

He added that radiation exposure is a serious issue and patients need to talk to their doctors before undergoing any tests that exposes them to radiation to ensure the test is appropriate and the patient fits under patient selection guidelines published by the American Heart Association and the American College of Radiology.

Source: Medical University of South Carolina

Citation: Cancer risk from cardiac CT overstated: researchers say (2008, November 10) retrieved 10 April 2024 from <https://medicalxpress.com/news/2008-11-cancer-cardiac-ct-overstated.html>

<p>This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.</p>
--