CT radiation risk less than risk of examination indicator

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(HealthDay)—For young adults needing either a chest or abdominopelvic computed tomography (CT), the short-term risk of death from underlying morbidity is greater than the long-term risk of radiation-induced cancer, according to a study published in the May issue of *Radiology*.

Robert L. Zondervan, from Massachusetts General Hospital in Boston, and colleagues used data from the Research Patient Data Registry to assess medial and billing records from patients 18 to 35 years old who underwent chest or abdominopelvic CT from 2003 to 2007 at three

university-affiliated hospitals. Expected cancer incidence and death was calculated from the Biologic Effects of Ionizing Radiation VII method.

The researchers found that 21,945 patients had 16,851 chest and 24,112 abdominopelvic CT scans. Over an average 5.5-year follow-up, 7.1 percent (575 of 8,057) of chest CT patients and 3.9 percent (546 of 13,888) of abdominal CT patients died. However, the predicted risk of dying from CT-induced cancer was 0.1 percent (five of 8,057; P chest CT patients without a cancer diagnosis in whom only one or two scans were obtained; the corresponding numbers for abdominopelvic CT were 1.9 percent (219 of 11,291) and 0.1 percent (six of 11,291; P

"Among young adults undergoing body CT, risk of death from underlying morbidity is more than an order of magnitude greater than death from long-term radiation-induced cancer," the authors write.

More information: Abstract
Full Text (subscription or payment may be required)