

# Tricuspid regurgitant jet velocity up in childhood cancer survivors

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About one-quarter of adult survivors of childhood cancer who received chest-directed radiation therapy have increased tricuspid regurgitant jet velocity, according to research published online Jan. 7 in the *Journal of Clinical Oncology*.

(HealthDay)—About one-quarter of adult survivors of childhood cancer who received chest-directed radiation therapy (RT) have increased tricuspid regurgitant jet velocity (TRV), according to research published online Jan. 7 in the *Journal of Clinical Oncology*.

Gregory T. Armstrong, M.D., of St. Jude Children's Research Hospital in Memphis, Tenn., and colleagues conducted a cross-sectional assessment involving 498 adult survivors of childhood cancer (median age, 38.0 years; median time from primary diagnosis, 27.3 years) to examine the prevalence of pulmonary hypertension, a late effect of cancer therapy.

The researchers found that 25.2 percent of survivors who received chest-directed RT and 30.8 percent of those who received more than 30 Gy had increased TRV. Increased TRV correlated with increasing dose of RT, [body mass index](#) more than 40 kg/m<sup>2</sup>, and aortic valve regurgitation, in multivariate analysis. The odds of severe functional limitation on a six-minute walk were significantly increased for those with TRV more than 2.8 m/s versus those with a TRV  $\leq$ 2.8 ms/s (odds ratio, 5.20).

"In conclusion, we identified an increased prevalence of TRV more than 2.8 m/s, which may indicate [pulmonary hypertension](#), in a large, well-characterized population of [childhood cancer survivors](#)," the authors write. "Increased risk was associated with chest-directed RT exposure, potentially mediated through both cardiac and pulmonary dysfunction."

**More information:** [Abstract](#)  
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