Medical Xpress

Cancer risk up in bilateral retinoblastoma survivors

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Photo courtesy: Bill Branson, U.S. National Cancer Institute

For survivors of bilateral retinoblastoma, family history is associated with an increased risk of second cancers, especially melanoma, according to a study published online Feb. 21 in the *Journal of Clinical Oncology*.

(HealthDay) -- For survivors of bilateral retinoblastoma (Rb), family history is associated with an increased risk of second cancers (SCs), especially melanoma, according to a study published online Feb. 21 in the *Journal of Clinical Oncology*.

Ruth A. Kleinerman, M.P.H., of the National Cancer Institute in Rockville, Md., and colleagues evaluated the risk of SCs in a cohort of 1,852 one-year survivors of Rb, including 1,306 with bilateral and 816 with unilateral Rb. SCs were identified using medical records and self-report. The presence of inherited or de novo *RB1* germline mutation was inferred from laterality and positive family history of Rb.

The researchers found that, after adjusting for treatment, age, and length of follow-up, there was an increased risk of SCs associated with family history of Rb for bilateral survivors (relative risk [RR], 1.37; 95 percent confidence interval [CI], 1.00 to 1.86). For survivors with a family history of Rb, there was a significantly elevated risk of melanoma (RR, 3.08; 95 percent CI, 1.23 to 7.16), but no increase in the risk for bone or soft tissue sarcoma. After adjusting for competing risk of death, 50 years after diagnosis of bilateral Rb, the cumulative incidence of SCs was significantly increased for survivors with a family history than survivors with no family history (47 versus 38 percent; P = 0.004).

"All bilateral survivors, especially those with a family history of Rb, and their affected family members should be alert to the risk of melanoma, especially that posed by excessive sun exposure," the authors write.

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