Factors predict low BMD in pediatric blood cancer survivors

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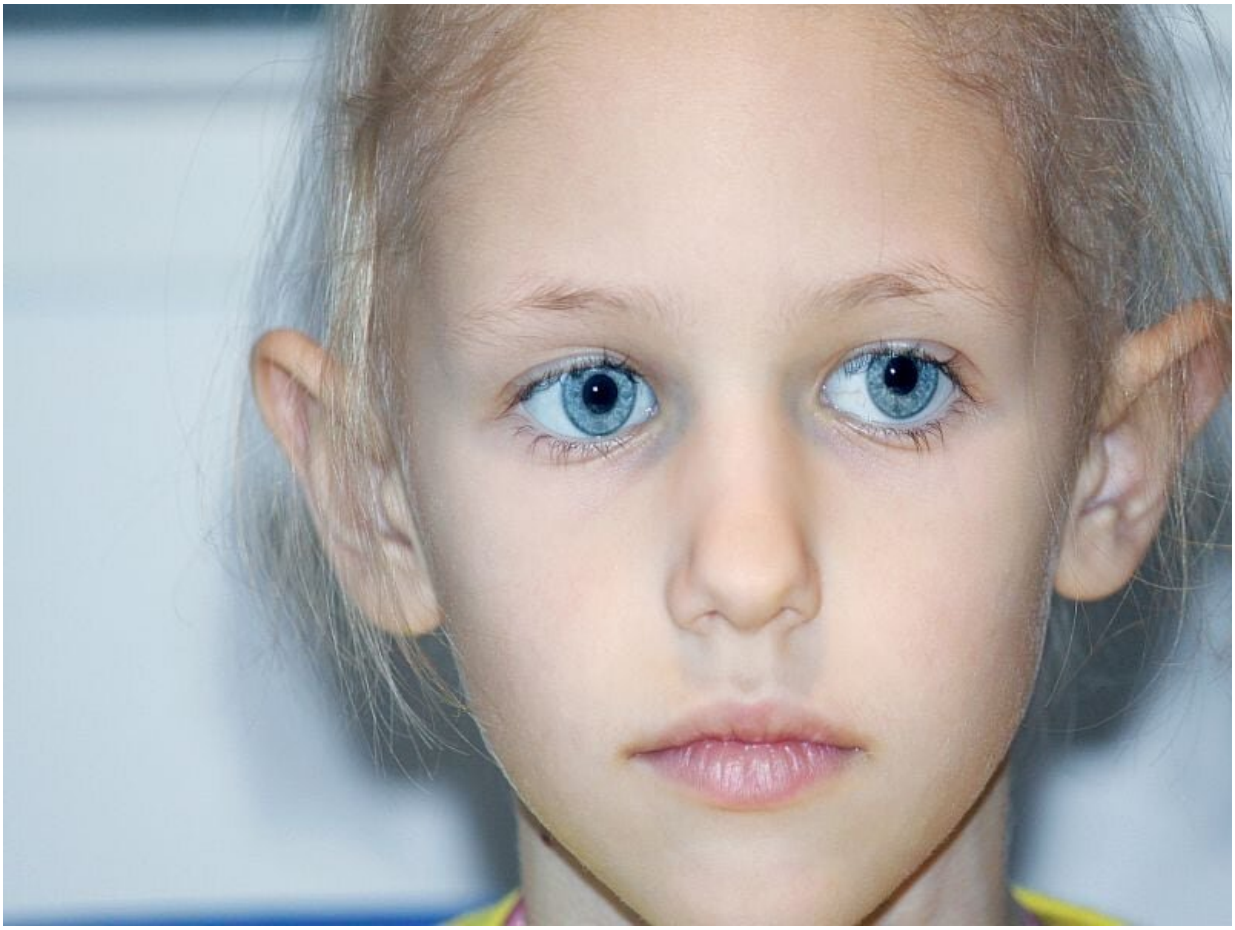

Low bone mineral density (BMD) is common in childhood leukemia and

lymphoma survivors, according to a study published online Sept. 19 in *Cancer*.

Hadley M. Bloomhardt, M.D., from the Yale School of Medicine in New Haven, Connecticut, and colleagues estimated the frequency of reduced BMD detected by off-therapy surveillance with dual-energy X-ray absorptiometry, factors associated with reduced BMD, and the association of reduced BMD with fractures among 542 childhood leukemia/lymphoma survivors (51.5 percent female; mean age, 15.5 years) attending two survivorship clinics (Jan. 1, 2004, to Aug. 31, 2016).

The researchers found that when evaluated, patients were a mean of six years posttherapy, and 116 reported posttherapy fractures. In 17.2 percent of participants, lumbar spine BMD was low, and 3.5 percent had very-low BMD. However, frequencies varied considerably between subgroups, with 10.8 percent of survivors aged 15 to 19 years at diagnosis having very-low BMD. Older age at diagnosis, white race, and being underweight were significantly associated with low BMD in multivariate analysis. There were greater odds of nondigit fractures (odds ratio, 2.2) and, specifically, long-bone fractures (odds ratio, 2.7) among survivors with low BMD.

"Future studies are needed to investigate long-term fracture risk and interventions to prevent fractures in the growing population of older adult childhood cancer survivors," the authors write.

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