Sickle cell disease may up risk for poor COVID-19 outcomes

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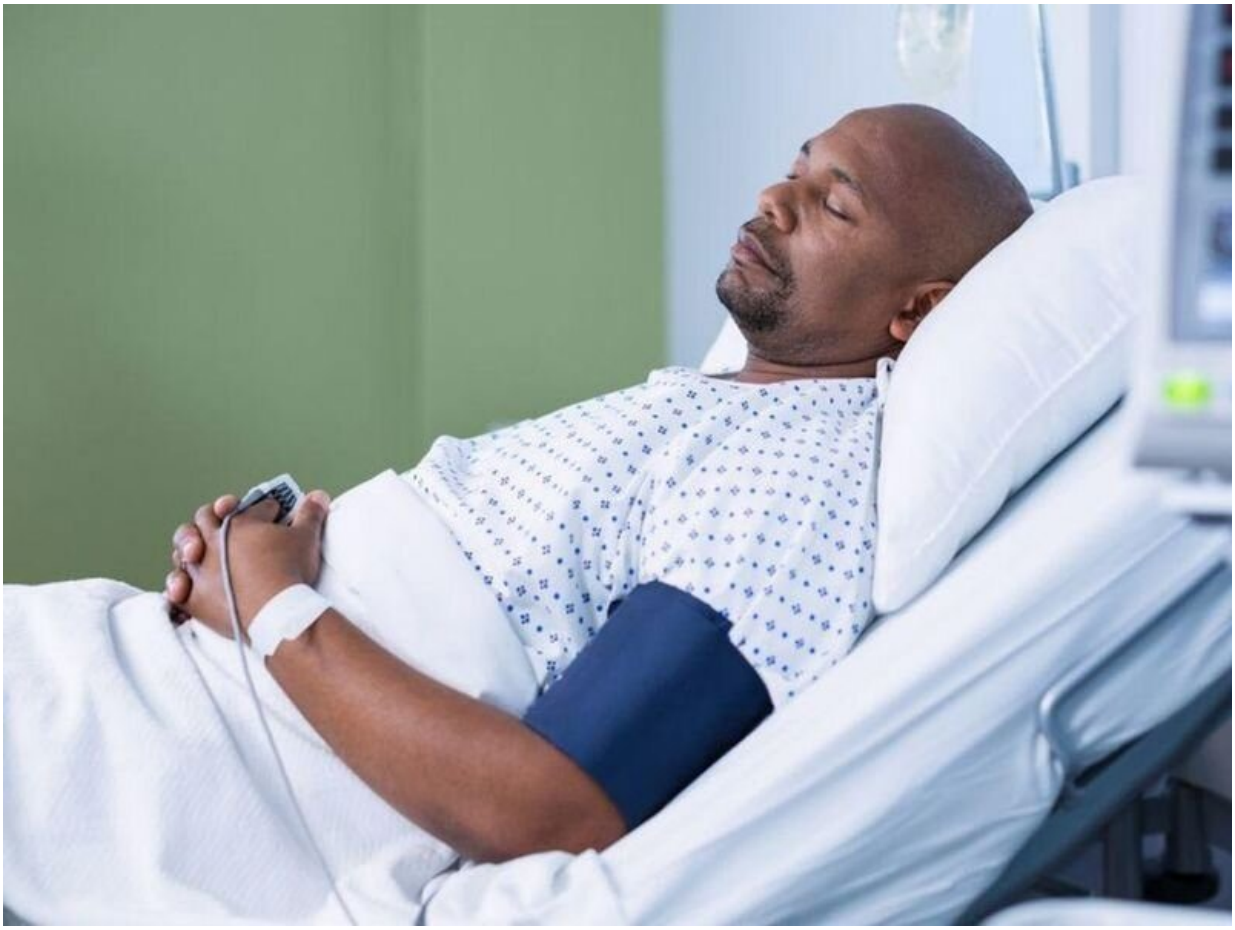

(HealthDay)—Sickle cell disease is associated with a fourfold increased

risk for COVID-19-related hospitalization and a more than twofold increased risk for COVID-19-related death, according to a research letter published online July 20 in the *Annals of Internal Medicine*.

Ashley Kieran Clift, M.B.B.S., from the University of Oxford in the United Kingdom, and colleagues assessed the risk for COVID-19-related hospitalization (Jan. 24, 2020, to Sept. 30, 2020) and death (to Jan. 18, 2021) in children and adults with sickle cell disorders. The QResearch database was used to identify patients of 1,317 general practices with individual-level linkage to severe acute respiratory syndrome coronavirus 2 test results from Public Health England, hospital admissions data, and the national death register.

The researchers found that sickle cell disease was associated with increased risks for COVID-19-related hospitalization (hazard ratio [HR], 4.11) and death (HR, 2.55). Adults with sickle cell disease accounted for 0.79 percent of hospitalizations and 0.20 percent of deaths, while they made up 0.04 percent of the cohort. Individuals with sickle cell trait also had a higher risk for COVID-19-related hospitalization (HR, 1.38) and death (HR, 1.51).

"Several aspects of sickle cell phenotypes overlap with the pathophysiology of severe COVID-19, which could be relevant mechanisms worthy of further study, as should the directionality of infection and sickle crisis," the authors write.

More information: Abstract/Full Text