Cerebral venous sinus thrombosis rate up after Ad26.COV2.S shot

November 1 2021

(HealthDay)—The cerebral venous sinus thrombosis (CVST) rate is

increased after Ad26.COV2.S vaccination compared with the prepandemic rate, according to a research letter published online Nov. 1 in *JAMA Internal Medicine*.

Aneel A. Ashrani, M.D., from the Mayo Clinic in Rochester, Minnesota, and colleagues compared age- and sex-specific CVST rates after Ad26.COV2.S vaccination to the prepandemic rate. All incident cases of CVST in Olmsted County, Minnesota, were identified from Jan. 1, 2001, through Dec. 31, 2015. Data from the U.S. Centers for Disease Control and Prevention Vaccine Adverse Event Reporting System from Feb. 28, 2021, to May 7, 2021, were used to estimate CVST incidence after Ad26.COV2.S vaccination.

The researchers found that from 2001 through 2015, the overall age- and sex-adjusted CVST incidence was 2.34 per 100,000 person-years (PY; age-adjusted CVST rates of 2.46 and 2.34 per 100,000 PY for women and men, respectively). The highest CVST rate occurred in men aged 65 years or older (6.22 per 100,000 PY). There were 46 potential CVST events occurring within 92 days after administration of 8,727,851 Ad26.COV2.S vaccine doses, as of May 7, 2021. Eight events were excluded; of the 38 objectively diagnosed cases of CVST, 71.1 percent occurred in women (median patient age, 45 years). Thirty-one of the cases (81.6 percent) occurred within 15 days after vaccination. The overall incidence of CVST postvaccination was 8.65 per 100,000 PY at 15 days; the 15-day incidence rates were 13.01 and 4.41 per 100,000 PY for women and men, respectively. Compared with the pre-COVID-19 pandemic rate, the postvaccination CVST rate among women was 5.1-fold higher, with the highest risk seen for women aged 40 to 49 years.

"The higher rate of this rare adverse effect must be considered in the context of the effectiveness of the vaccine in preventing COVID-19," the authors write.

More information: Abstract/Full Text