

CARDIOVASCULAR MEDICINE AND SOCIETY

Cerebral Venous Sinus Thrombosis in the U.S. Population, After Adenovirus-Based SARS-CoV-2 Vaccination, and After COVID-19



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Thrombosis has emerged as a major concern in patients with coronavirus disease-2019 (COVID-19) (1,2). Most recently, thrombotic events, particularly cerebral venous sinus thrombosis (CVST) were reported within days after receiving severe acute respiratory syndrome-coronavirus-2 (SARS-CoV-2) adenovirus-based vaccines (3). Initially, cases of CVST were reported in close succession to the use of the ChAdOx1 nCoV-19 vaccine (AstraZeneca), mostly in women of childbearing age, with many cases being associated with thrombocytopenia. Subsequently, 6 cases of CVST were reported in the United States with another adenovirus-based

vaccine, Ad26.COV2.S vaccine (Johnson & Johnson), among women of childbearing age. CVST is a rare but potentially devastating disease (4). Therefore, this issue led to a temporary pause in use of the J&J vaccine in the United States and variable age-/sex-based restrictions for the AstraZeneca vaccine in other countries. Herein, we report the rate of CVST associated with these 2 vaccines based on publicly reported data, versus those occurring after COVID-19, and the estimated incidence rates in the US population.

We used the data from the UK Medicines and Healthcare Products Regulatory Agency (MHRA) (5),

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