

CORONAVIRUS DISEASE 2019 (COVID-19)

CDC Health Alert for J&J Blood Clot Risk



Audience: Physicians, Clinicians, Incident Commanders, Vaccine Coordinators, CMOs, Oncology CEC, Critical Care CEC

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CDC Issues Health Alert for J&J Vaccine Blood Clot Risk

Yesterday, the Centers for Disease Control and Prevention (CDC) issued a Health Alert for a rare type of blood clot found in six individuals after receiving the Johnson & Johnson (Janssen) COVID-19 vaccine. As of April 12, 2021, approximately 6.85 million doses of the J&J vaccine have been administered in the United States. The cases were reported to the Vaccine Adverse Event Reporting System (VAERS). In these cases, a type of blood clot called cerebral venous sinus thrombosis (CVST) was seen in combination with low levels of blood platelets (thrombocytopenia). All six cases occurred among women aged 18–48 years. The interval from vaccine receipt to symptom onset ranged from 6–13 days. One patient died.

Treatment Guidance for Physicians and Clinicians

Physicians and clinicians should maintain a high index of suspicion for symptoms that might represent serious thrombotic events and/or thrombocytopenia in patients who have received the J&J COVID-19 vaccine within the past three weeks. When these specific types of blood clots are observed following J&J COVID-19 vaccination, treatment is different from the treatment that might typically be administered for blood clots. Based on studies conducted among the patients diagnosed with serious thrombotic events and/or thrombocytopenia after the AstraZeneca COVID-19 vaccine in Europe, the pathogenesis of these rare and unusual adverse events after vaccination may be associated with platelet-activating antibodies against platelet factor-4 (PF4), a type of protein. Usually, the anticoagulant drug called heparin is used to treat blood clots. In this setting, the use of heparin may be harmful, and alternative treatments need to be given.

Actions for Physicians and Clinicians

1. Pause the use of the J&J COVID-19 vaccine
2. Maintain a high index of suspicion for symptoms that might represent serious thrombotic events and/or thrombocytopenia in patients who have recently received the J&J COVID-19 vaccine, including severe headache, backache, new neurologic symptoms, severe abdominal pain, shortness of breath, leg swelling, petechiae (tiny red spots on the skin), or new or easy bruising. If you suspect vaccine-

associated thrombosis and/or thrombotic thrombocytopenia, avoid the use of heparin. A hematology consultation is strongly encouraged. Further evaluation and treatment guidance are forthcoming.

3. In patients with a thrombotic event and thrombocytopenia after the J&J COVID-19 vaccine, evaluate initially with a screening PF4 enzyme-linked immunosorbent (ELISA) assay as would be performed for autoimmune HIT. Consultation with a hematologist is strongly recommended.
4. Do not treat patients with thrombotic events and thrombocytopenia following receipt of J&J COVID-19 vaccine with heparin, unless HIT testing is negative.
5. If HIT testing is positive or unable to be performed in patient with thrombotic events and thrombocytopenia following receipt of J&J COVID-19 vaccine, non-heparin anticoagulants and high-dose intravenous immune globulin should be strongly considered.
6. Report adverse events to VAERS, including serious and life-threatening adverse events and deaths in patients following receipt of COVID-19 vaccines as required under the Emergency Use Authorizations for COVID-19 vaccines.

For More Information

Read the full Health Alert [here](#).

Resources on thrombotic thrombocytopenia after AstraZeneca COVID-19 vaccine

<https://www.nejm.org/doi/full/10.1056/NEJMoa2104840>[external icon](#),

<https://www.nejm.org/doi/full/10.1056/NEJMoa2104882>[external icon](#)

Frequently asked questions about VAERS reporting for COVID-19 vaccines [VAERS – FAQs](#)

How to report to [VAERS](#)

CDC materials on [stroke](#) and NIH materials on [thrombocytopenia](#)