

Cerebral Venous Sinus Thrombosis with Thrombocytopenia

Summary created from the CDC presentation delivered on April 27, 2021 titled
Johnson & Johnson/Jassen COVID-19 Vaccine and Thrombosis with Thrombocytopenia
Syndrome: Update for Clinicians

Full powerpoint from this seminar can be found here:

<https://emergency.cdc.gov/coca/ppt/2021/COCA-Call-4-27-2021-final.pdf>

Cerebral Venous Sinus Thrombosis

- Rare condition that occurs in 0.22-1.57 per 100,000
- Median age of occurrence = 37
- Female:male ratio of 3:1
- Platelet count is normal

Risk Factors:

- Prothrombotic conditions (genetic or acquired)
- Oral Contraceptives
- Pregnancy/Post-partum period
- Infection
- Mechanical precipitants (ex: lumbar puncture)

What makes the CVST post-vaccination cases unique?

The cases were CVST with Thrombocytopenia
(platelet count $<150\text{K}/\text{mm}^3$)

Characteristics of patient's with CVST and thrombocytopenia

- 15 patients have been diagnosed with this condition after receiving the Janssen COVID vaccine
 - 7.98 million doses had been administered
- Females aged 18-49 (n = 13), females 50+ (n = 2), male of any age (n = 0)
- Median time to symptom onset was 8 days post-vaccination
 - Maximum time to onset: ~14 days post-vaccination
- No other noted similarities with current estrogen/progesterone use, pregnancy or postpartum status
 - 7 patients were noted to be obese
- 11 patients have had a positive HIT ELISA antibody test
 - Remaining 4 patients, results were not available

A few things to note...

- CVST with thrombocytopenia has not been observed with the mRNA vaccines
- Specific Notes for clinicians from the presentation:
 - Maintain high index of suspicion for symptoms that might represent thrombotic events or thrombocytopenia in patients who have recently received the Janssen COVID Vaccine
 - Patients with a history of stroke or embolic event do not appear to be at an increased risk as this is an immune-mediated problem
 - Patient needs to make an informed decision about receiving this vaccine
- Treatment of CVST with thrombocytopenia:
 - *Do not treat patient with Heparin, unless HIT testing is negative!!*
 - Non-heparin anticoagulants and high dose IVIG should be strongly considered

Talking points for your patients:

- The population at risk appears to be women 18-49 years old, within 1-2 weeks of receiving the Janssen vaccine
- If the patient has an **active** clot - discuss alternative vaccine options
- If your patient develops severe headache, abdominal pain, leg pain, SOB, easy bruising, or tiny blood spots under skin within 2 weeks of receiving the vaccine, contact your MD or seek medical attention immediately
- Reinforce confidence in the FDA's evaluation and determination to resume vaccinating with the Janssen Vaccine
 - The risk to the typical skilled nursing facility patient (age >50yrs old) is exceptionally rare!