

Vaccine-induced Immune Thrombotic Thrombocytopenia

Vaccines have been key in preventing COVID-19 infections and the AstraZeneca vaccine has been widely used. However, increased rates of thromboembolic events were identified in recipients, and, subsequently, a syndrome of vaccine-induced immune thrombotic thrombocytopenia (VITT) was described whereby recipients presented with cerebral venous sinus thrombosis, hemorrhagic infarctions, and - consequently - raised intracranial pressure.

Definitive Diagnosis

(must meet all five criteria):

COVID vaccine 4 to 42 days prior to symptom onset

Any venous or arterial thrombosis (often cerebral or abdominal)

Thrombocytopenia (platelet count < 150 x 10⁹/L)

Positive PF4 "HIT" (heparin-induced thrombocytopenia) ELISA

Markedly elevated D-dimer (> 4 times upper limit of normal)

Complications

Cerebral venous sinus thrombosis after Vaccine-induced Immune Thrombotic Thrombocytopenia

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