Vaccine-Induced Immune Thrombotic Thrombocytopenia (VITT) Diagnostic Flow Chart (Updated 20 April, 2021)

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- 1. Signs/symptoms of thromboembolism
 - NEW ONSET:
 - Severe, persistent headache +/- vision change, seizure-like activity
 - Severe persistent abdominal pain
 - Leg pain or swelling
 - Chest pain and/or shortness of breath
- 2. COVID vaccination 4-28 days prior to onset (AstraZeneca or Johnson & Johnson)

NO to 1 and/or 2

Not VITT: Manage according to standard practice



YES to both

SCREEN for VITT

- Order appropriate imaging based on symptom presentation
- Order urgent complete blood count

NO thrombosis on imaging

Platelet count >150 x 10⁹/L

Acute thrombosis present AND platelet count <150 x 10⁹/L

Possible VITT

Initial evaluation

- Order standard coagulation laboratory studies (PT, aPTT, Clauss fibrinogen, D-dimer)
- Order immunoassay for platelet factor 4 (PF4) antibodies (HITT ELISA is most reliable)

PF4 ELISA negative

PF4 ELISA positive (high OD reading)

VITT CONFIRMED

If PF4 antibody immunoassay is not available, check D-dimer level. Markedly elevated D-dimer levels (e.g., >4x threshold for VTE exclusion) is highly suggestive of VITT. Treat as per VITT.

VITT Treatment

- IVIG (0.5-1g/kg daily for 2 days)
- Steroids if platelets <50 x 10 1/2
- Avoid platelet transfusions, heparin, LMWH, VKA
- Give non-heparin anticoagulant: fondaparinux, argatroban, DOAC if platelet count >50 x 10⁹/L and no serious bleeding
- · Consult thrombosis expert
- Early plasma exchange if platelets < 30 x 10 L after IVIG and steroids