Guidance agreed with Expert Haematology Panel (EHP) April 10th 2021
Guidance agreed with British Society of Neuroradiologists (BSNR) and RCR April 11th 2021

Management of patients presenting to the Emergency Department/ Acute Medicine with symptoms

The condition of concern is Covid-19 Vaccine induced Thrombosis and Thrombocytopenia (VITT)

Key Decision point 0 – Does this patient’s presentation raise any concern about VITT?

If no, manage as per routine practice for specific presentation
If yes, continue with this guidance

Concern- cases usually present with progressive thrombosis, with a high preponderance of cerebral venous sinus thrombosis. Splanchnic vein thrombosis is common and pulmonary embolism and arterial ischaemia are also seen. Bleeding can be significant and unexpected. Symptoms of concern are:

• Persistent or severe headaches, seizures or focal neurology, • Shortness of breath, persistent chest or abdominal pain, • Swelling, redness, pallor or cold lower limbs

Key Decision point 1 – initial assessment

Has the patient presented with symptoms >4-28 days since vaccination

Send FBC

Is the platelet count > 150 x 10⁹/L

If Y –VITT is unlikely

As this is an emerging area of practice, please continue to check back for updates
Guidance agreed with Expert Haematology Panel (EHP) April 10th 2021
Guidance agreed with British Society of Neuroradiologists (BSNR) and RCR April 11th 2021

Key Decision point 2 - is patient safe to go home?

Does the patient have symptoms of another clinical condition that needs investigation

If No then home with safety net advice to return if persistent or escalating symptoms or other concern for thrombosis for repeat testing
If Yes then further work up required for alternative diagnoses

Key Decision point 3 - if platelets < 150 x 10^9/L

Send clotting (fibrinogen) and d-dimer test

- d-dimer <2000, normal fibrinogen
- d-dimer > 2000*, low fibrinogen

Not VITT - Ix for other diagnosis

Suspect VITT
Haematology advice
Rx as per guidance from Expert Haematology Panel
Appropriate imaging and other specialty referral

As this is an emerging area of practice, please continue to check back for updates

* D Dimer as mcg/L, (includes FEU or DDU) = 2mg/L (cases -D Dimers > 4000 mcg/L but D Dimers 2000-4000 mcg/L need to be discussed as probable case)
Guidance agreed with Expert Haematology Panel (EHP) April 10th 2021
Guidance agreed with British Society of Neuroradiologists (BSNR) and RCR April 11th 2021

<table>
<thead>
<tr>
<th>Presentation</th>
<th>Basic Outcome</th>
</tr>
</thead>
<tbody>
<tr>
<td>Not AZ vaccine,</td>
<td>Home, no follow up (unless needs workup of other diagnosis of concern)</td>
</tr>
<tr>
<td>AZ but time window not &gt;4-28 days</td>
<td>Home, no follow up (unless needs workup of other diagnosis of concern)</td>
</tr>
<tr>
<td>AZ, 5-28 days, platelets &gt;150 x 10⁹</td>
<td>Home with safety net to return for retesting if any exacerbation of symptoms, (unless needs workup of other diagnosis of concern)</td>
</tr>
<tr>
<td>AZ, 5-28 days, platelets &lt;150 x 10⁹</td>
<td>Further investigation and work up including d-dimer &amp; fibrinogen</td>
</tr>
</tbody>
</table>

**Neuroimaging Recommendations**

1. If no clinical and haematological features of VITT are present, headache symptoms should be managed via usual headache pathways, with neuro-imaging only if clinically appropriate. Cerebral venography is not generally indicated.

2. For patients **WITH** VITT and headache symptoms, dedicated cerebral venous imaging is appropriate.
   i. Non-contrast CT brain combined with contrast enhanced CT cerebral venography is rapid, accessible and has very high diagnostic accuracy.
   ii. MR/MR venography is an equally accurate alternative and may be preferred in some centres.

Other Radiology imaging in discussion with radiology – CTPA/ CT Abdo as required by clinical suspicion.

*As this is an emerging area of practice, please continue to check back for updates.*