

Primary Care Management of Suspected Thromboembolism with Thrombocytopenia after COVID-19 Vaccination

Serious thromboembolic events with concurrent thrombocytopenia have occurred very rarely following vaccination with AstraZeneca (AZ) COVID-19 vaccine. This includes venous thrombosis, sometimes involving unusual sites such as cerebral venous sinus thrombosis (CVST), splanchnic vein thrombosis, or arterial thrombosis, combined with thrombocytopenia (1).

It is currently estimated that the overall incidence of CVST following the AZ vaccine is around 4 per million first doses administered. Suspected cases have been reported in patients of all ages and genders and currently, no specific predisposing factors have been identified.

Thromboembolism with thrombocytopenia should be considered in a patient presenting to primary care between 4 and 28 days after a coronavirus vaccination with **any** of the following symptoms:



new onset of severe headache, which is getting worse and does not respond to simple painkillers



an unusual headache which seems worse when lying down or bending over, or may be accompanied by blurred vision, nausea and vomiting, difficulty with speech, weakness, drowsiness or seizures



new unexplained pinprick bruising or bleeding



shortness of breath, chest pain, leg swelling or persistent abdominal pain

A normal full blood count, d-dimer and fibrinogen may be used to exclude thromboembolism with thrombocytopenia in primary care but only if the patient is not acutely unwell, and the blood results will be available, reviewed and acted upon the same day. All other cases require urgent discussion with secondary care (2). Alternative life-threatening causes of headache should be referred in the usual way (3). Further information around the COVID-19 vaccination programme can be found in the RCGP's [SARS-CoV-2 Vaccination](#) eLearning resource.

References

1. <https://www.gov.uk/government/publications/covid-19-vaccination-blood-clotting-information-for-healthcare-professionals/information-for-healthcare-professionals-on-blood-clotting-following-covid-19-vaccination> (accessed 13th April 2021)
2. https://b-s-h.org.uk/media/19512/guidance-version-10-on-mngmt-of-thrombosis-with-thrombocytopenia-occurring-after-c-19-vaccine_20210401.pdf (accessed 13th April 2021)
3. <https://cks.nice.org.uk/topics/headache-assessment/diagnosis/headache-diagnosis/> (accessed 13th April 2021)