FSRH CEU statement: Thrombosis with thrombocytopenia, AstraZeneca COVID-19 vaccination and combined hormonal contraception  
10th May 2021

The AstraZeneca COVID-19 vaccine and venous thrombosis with thrombocytopenia 
A very small number of cases of a specific, rare type of thrombosis with associated thrombocytopenia have been reported as an apparent idiosyncratic reaction to the first dose of the AstraZeneca COVID-19 vaccine. Amongst the estimated 22.6 million individuals that have received their first dose of this vaccine in the UK, 242 cases have been reported involving thrombosis at various sites, including cerebral venous sinus thrombosis (CVST), with concurrent thrombocytopenia; there have been 49 deaths. The data suggest a slightly higher incidence in younger adult age groups.1,2

Venous thrombosis with thrombocytopenia remains rare after AstraZeneca COVID-19 vaccination and the benefit of vaccination in reducing COVID-19-related morbidity and mortality is very significant.1,2 On the basis of the current evidence, the Joint Committee on Vaccination and Immunisation (JCVI) has advised that for adults aged over 40 the benefits of prompt vaccination with the AstraZeneca COVID-19 vaccine far outweigh the risk of adverse events. The JCVI advises that in the current UK context, adults under age 40 (and particularly those under age 30) without underlying health conditions that put them at increased risk of severe COVID-19 disease should receive an alternative COVID-19 vaccine if this is possible without incurring substantial delay. For adults under age 40 with risk factors for severe Covid-19 disease, delay to vaccination should be avoided.

Combined hormonal contraception (CHC) and venous thrombosis/CVST 
It is well documented that use of combined hormonal contraception is associated with increased risk of venous thrombosis, including CVST, although the absolute risk of a venous thromboembolic event remains small amongst CHC users.3-9 Current UK contraceptive prescribing guidance minimises risk of venous thrombosis by restricting CHC use by individuals with other risk factors for thrombosis.3,10

We do not know, however, that current or very recent use of CHC affects risk of this specific type of venous thrombosis with thrombocytopenia occurring after the first dose of the AstraZeneca COVID-19 vaccine. The MHRA currently advises that there are no known risk factors.2

What does FSRH CEU recommend? 
Choice of contraception. As usual, all CHC users should be made aware of the increased risk of venous thrombosis associated with use of CHC; they can choose from a range of alternative effective contraceptive options that are not associated with thrombosis. CHC users can be informed that we do not know how use of CHC affects risk of the specific type of thrombosis with thrombocytopenia that has been observed after AstraZeneca COVID-19 vaccination.

Should CHC users stop their pill, patch or vaginal ring when they are called for COVID-19 vaccination? We do not recommend that CHC users stop their contraception when they receive their first or second COVID-19 vaccine. Increased risk of thrombosis is likely to persist for some time after stopping CHC, therefore stopping immediately before vaccination is unlikely to significantly reduce thrombotic risk. Stopping CHC around the time of vaccination without switching to alternative effective contraception could
put users at risk of unplanned pregnancy with its associated risk of thrombosis, and at higher risk of thrombosis when CHC is restarted.

**CHC users will be vaccinated according to the JCVI recommendations.** After COVID-19 vaccination, as a precautionary measure, the MHRA advises that prompt medical advice should be sought by anyone who has new onset of symptoms such as severe, persistent headache, blurred vision, confusion, seizures, shortness of breath, chest pain, leg swelling, persistent abdominal pain, unusual skin bruising or petechiae beyond the injection site 4 days or more after vaccination.¹

**FSRH CEU guidance will be updated to reflect emerging evidence and in line with any new UK guidance on vaccination of individuals with additional risk factors for venous thrombosis/CVST.**

**References**


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The Clinical Effectiveness Unit (CEU) was formed to support the Clinical Effectiveness Committee of the Faculty of Sexual & Reproductive Healthcare (FSRH), the largest UK professional membership organisation working at the heart of sexual and reproductive healthcare. The FSRH CEU promotes evidence based clinical practice and it is fully funded by the FSRH through membership fees. It is based in Edinburgh and it provides a members’ enquiry service, evidence-based guidance, new SRH product reviews and clinical audit/research. [Find out more here.](https://www.fsrh.org)