


Save

Email

Send to

Display options 

Review > [Horm Mol Biol Clin Investig.](#) 2021 Nov 17;43(1):89-96. doi: 10.1515/hmbci-2021-0037.

COVID 19 vaccine in patients of hypercoagulable disorders: a clinical perspective

Nitin Ashok John¹, Jyoti John², Praful Kamble¹, Anish Singhal¹, Vandana Daulatabad³, Immadi S Vamshidhar¹

Affiliations + expand

PMID: 34786893 DOI: [10.1515/hmbci-2021-0037](https://doi.org/10.1515/hmbci-2021-0037)

Abstract

COVID 19 is an infectious disease caused by severe acute respiratory syndrome corona virus 2. Thromboembolism has been a characteristic manifestation in most of the severely ill COVID-19 patients. Thromboembolism in COVID 19 infection is attributed to injury to the vascular endothelial cell, hypercoagulability and blood stasis. The hypercoagulable state of blood and thrombophilic diseases leads to hypercoagulability. COVID 19 infected patients with pre-existing hypercoagulable disorders have higher risk of developing thrombosis and thromboembolism and such thrombotic episodes may prove to be severely morbid in these patients. As immune-prophylaxis COVID 19 vaccines are being administered to the public. The known side effects of the COVID 19 vaccine are mild to moderate and include fever, chills, nausea, vomiting, headache, fatigue, myalgia, malaise, pain and swelling at injection site and diarrhea. Thrombosis with thrombocytopenia has been noted as a rare side effect of COVID 19 vaccine. Such side effect of COVID 19 vaccine in patients of hypercoagulable disorder may prove to be fatal. The health care workers should be cautious and judicious in managing such patients. A detailed lab profile for coagulable state of blood should be carried out in all patients COVID 19 infected patients with pre-existing hypercoagulability diseases. The patients should also be health educated regarding side effects of vaccine especially with those indicating thrombosis and they should be warranted to receive immediate medical care in case of any side effects or complications. Paucity of literature gave us an impetus to review management profile in patients of hypercoagulable disorders.

Keywords: COVID 19 vaccine; hypercoagulability syndrome; hypercoagulable disorders; thrombocytopenia; thromboembolism; thrombosis.

© 2021 Walter de Gruyter GmbH, Berlin/Boston.

Similar articles

[Review and evolution of guidelines for diagnosis of COVID-19 vaccine induced thrombotic thrombocytopenia \(VITT\).](#)

Favaloro EJ, Pasalic L, Lippi G.

Clin Chem Lab Med. 2021 Nov 1;60(1):7-17. doi: 10.1515/cclm-2021-1039. Print 2022 Jan 26.

PMID: 34714985 Review.

FULL TEXT LINKS



ACTIONS

 Cite

 Favorites

SHARE



PAGE NAVIGATION

< Title & authors

Abstract

Similar articles

Cited by

References

Publication types

MeSH terms

Substances

Related information

LinkOut - more resources