

Abstract

Corona Virus Disease 2019 (COVID19) is still an ongoing pandemic, triggered by the severe acute respiratory syndrome corona virus 2 (SARS Cov-2). Vaccination is presently the most effective method to fighting against COVID-19 pandemic. Available vaccines have proven highly safe and effective.

Acute pulmonary Embolism is a common cause of hypoxemic respiratory failure, and the incidence is increasing since the Covid -19 outbreak. While Covid – 19 itself signifies a prothrombotic state, introduction of Covid vaccines further increased the risk of unprovoked venous thromboembolism and risk of pulmonary embolism to some extent.

World Health Organization (WHO) has approved several vaccines to be used to combat Covid-19 infection. Out of these there have been few reports of thrombosis after ChAdOx1 nCoV-19 Vaccine (AstraZeneca vaccine) which is thought to be due to vaccine induced immune Thrombotic Thrombocytopenia (VITT) syndrome. The exact incidence of this syndrome is unknown, but it appears to be rare. Thrombocytopenia, very high d-dimer values often seen in typical venous thromboembolic events, low fibrinogen levels, and thrombosis are the common characteristics. This case is based on a 56-year-old previously well female who presented with gradual onset shortness of breath after 3 weeks of first dose of AstraZeneca vaccine. Blood investigations showed marginally low platelet count, very high d-dimer levels, and low fibrinogen levels. CT Pulmonary Angiogram revealed massive pulmonary embolism. The reported cases so far were due to vaccine induced Thrombotic Thrombocytopenia (VITT) which is a clinical syndrome demonstrated prominent resemblances to Heparin-Induced Thrombocytopenia (HIT), but none of the cases received prior

heparin treatment at the time period they develop symptoms. We present a case of severe pulmonary embolism after administration of the AstraZeneca vaccine, resembling Thrombotic Thrombocytopenia (VITT) but with only mild thrombocytopenia.