



EUROPEAN JOURNAL OF PHARMACEUTICAL AND MEDICAL RESEARCH

www.ejpmr.com

SJIF Impact Factor 6.222

<u>Case Study</u> ISSN 2394-3211 EJPMR

PULMONARY THROMBOEMBOLISM AFTER COVID-19 VACCINATION – A CASE REPORT

Dr. Ashish Kumar¹, Dr. Ketaki Kainth² and Dr. Vinay Jishtu^{3*}

¹ M.D Medicine Civil Hospital Jawali Kangra H.P.
² Medical Officer Civil Hospital Nurpur H.P.
³ M.D Medicine Community Health Centre Mashobra Shimla H.P.

*Corresponding Author: Dr. Vinay Jishtu M.D Medicine Community Health Centre Mashobra Shimla H.P.

Article Received on 18/01/2022

Article Revised on 04/02/2022

Article Accepted on 25/02/2022

ABSTRACT

Covid 19, a pandemic impaired global health at large scale and caused huge morbidity and mortality. Till now only vaccination is the preventive measure with uncertain side effects. Here we report a such unusual side effect i.e Pulmonary Thromboembolism after covid -19 vaccination.

KEYWORDS: Covid -19, Covishield, Pulmonary Thromboembolism.

INTRODUCTION

Coronavirus disease (COVID-19) is an infectious disease caused by the SARS-CoV-2 virus. Older people and those with underlying medical conditions like cardiovascular disease, diabetes, chronic respiratory disease are more likely to develop serious illness. Globally, more than $4 \cdot 1$ million people have died from COVID-19^[1] For prevention Covid 19 vaccine instituted in state of Himachal Pradesh is Covishield which is a recombinant, replication-deficient chimpanzee adenovirus vector encoding the SARS-CoV-2 Spike (S) glycoprotein.

CASE REPORT

43 year old male presented to OPD with gradually progressive dyspnoea on exertion for last one week in july 2021. No h/o cough, chest pain, orthopnea or paroxysmal nocturnal dyspnoea. No H/O swelling feet, past surgery or immobilization, hemoptysis or malignancy. No H/O covid 19 infection.

There was H/O Covishield 1^{st} dose administration 3 weeks ago. On examination PR 104/min, BP -110 / 68 mm HG. Rest of the general and Systemic examination was within normal limit. Further investigation showed raised D –Dimer – 4.11 microgm FEU/ml. Cxray showed normal lung air fields. CT Pulmonary angiography showed filling defect in bilateral pulmonary arteries suggestive of Thrombus(Fig1 & 2). Patient was managed with Low Molecular Weight Heparin followed by new oral anticoagulants. In Follow up patient was symptomatically better.



Fig. 1 CTPA showing filling defect in both pulmonary arteries.



Fig. 2: CTPA film showing pulmonary thrombosis.

DISCUSSION

Pulmonary thromboembolism is a life threatning disease. Wells score is helpful tool for its predictability. Schultz et al reported five cases who presented with venous thrombosis and thrombocytopenia after 1st dose of nCoV-19 vaccine and Four of these cases had cerebral venous sinus thrombosis. This syndrome has since been termed vaccine-induced immune thrombotic thrombocytopenia (VITT).^[2,3,4] A similar condition has been described with another adenovirus vector vaccine, Ad26.COV2.S (Johnson & Johnson).^[5,6]

CONCLUSION

In patients with high risk of thrombosis, vaccine should be administered judiciously. Any patient developing cough or dyspnoea post vaccination should be screened for pulmonary thromboembolism and similarly should screen for other sites thrombosis depending upon symptoms.

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