

中文題目：早期診斷及治療因疫苗引起之免疫血栓性血小板低下症所面臨的挑戰

英文題目：The challenge of early diagnosis and management in a patient with vaccine-induced immune thrombotic thrombocytopenia

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Introduction

Vaccine- induced immune thrombotic thrombocytopenia (VITT) is a rare but fatal complication, manifested by severe venous thromboembolism in a broad spectrum of sites and concomitant thrombocytopenia after ChAdOx1 nCoV-19 vaccination.

Case presentation

Here, we reported a 55 y-o female who developed severe headaches 8 days after receiving the first dose of the ChAdOx1 nCoV-19 vaccination. Computed tomography (CT) showed cerebral venous sinus thrombosis, intracranial hemorrhage (ICH) in right temporal and occipital lobes and right cerebellum with subarachnoid hemorrhage (SAH) and bilateral pulmonary emboli. During admission, she had markedly raised D-dimer level. Blood test revealed positive for antibody against platelet factor 4 (PF4) on several days with very high optical density readings. She was commenced on intravenous immunoglobulin, and hydrocortisone initially. Due to poor response to initial treatment, therapeutic plasma exchange was initiated. The patient died on the 21st day of hospitalization.

Discussion

This vaccine type- specific complication may manifest in thrombosis of the cerebral venous sinus or splanchnic vein and pulmonary embolism, accompanied by bleeding due to thrombocytopenia. Intravenous immune globulin (IVIG) and plasma exchange could be useful therapeutic options for treatment of VITT.

Conclusion

This case highlights the challenges of diagnosis and management of VITT.