

COVID-19 Pfizer Vaccine Associated Case of Microscopic Polyangiitis Complicated by Cardiac Tamponade

With over 412 million confirmed cases and over 5.8 million deaths, the COVID-19 pandemic has become one of the most pervasive pandemics in modern history. Vaccinations have become the world's championed defense against the novel virus, with widespread uptake of the vaccine considered critical to our way out of this global pandemic. One year after the reported start of the pandemic, the FDA approved three US-developed vaccines as being safe and effective for use. Over 8 billion doses of COVID-19 vaccines have been administered around the world. But rare and sometimes unforeseen side effects of vaccinations have emerged. In this case report, we present a 74-year-old woman with a history of hypertension, type 2 diabetes mellitus and hypothyroidism who developed microscopic polyangiitis following Pfizer COVID-19 vaccination. Diagnosis of microscopic polyangiitis was confirmed by kidney biopsy. The patient's microscopic polyangiitis progressed to pericardial effusion and eventual cardiac tamponade. In the case of this patient, we suspect there to be a temporal association between vaccination and development of microscopic polyangiitis, however direct causation has not been determined.