

# A Possible Case of Hypertensive Crisis With Intracranial Haemorrhage After an mRNA Anti-COVID-19 Vaccine

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Vasilios G. Athyros, MD, FESC, FRSRH, FASA, FACS, FRSM<sup>1</sup>   
and Michael Doumas, MD<sup>1</sup> 

We report a possible side effect of a messenger RNA (mRNA) anti-coronavirus vaccine 2019 (anti-COVID-19) to highlight the need for improved preventive strategies [<https://www.medpagetoday.com/infectiousdisease/covid19vaccine/91814>].

A female patient aged 71 years recently had the first dose of the Moderna anti-COVID-19 vaccine. Three days later, she collapsed without any previous symptoms. A right hemiplegia, aphasia, and agnosia were diagnosed. She had a blood pressure (BP) of 210/110 mm Hg, while her lifetime values were around 110/70 mm Hg. A computed tomography scan showed an intracranial hemorrhage in the left basal ganglia. The patient was treated with 4 intravenous (IV) doses of 0.15 mg clonidine hydrochloride and 2 IV doses of furosemide (20 mg). However, BP remained over 180/100 mm Hg, despite treatment during hospitalization. There was no thrombocytopenia or other abnormal blood tests. There was no previous medication or bleeding tendency. Nine days after the initial event she passed away, without any improvement.

A study from Switzerland reported 9 patients with stage 3 arterial hypertension (AH) documented within a few minutes after the Pfizer (mainly) or the Moderna vaccination and lasted for 30 days.<sup>1</sup> From those, 8 were symptomatic and 6 had to attend an emergency unit. The authors attributed AH to vaccine components such as polyethylene glycol.<sup>1</sup> Most of the patients had AH before the vaccination; however, none had a

hemorrhagic event.<sup>1</sup> Some patients had a BP similar to those of the patient we describe.

The Health Ministry in Japan reported a case (<https://www.reuters.com/article/us-health-coronavirus-japan-death-idUSKBN2AU17Y>) of a woman, in her 60s, who died from a brain hemorrhage due to AH, 3 days after receiving an anti-COVID-19 mRNA vaccine (Pfizer). The connection to the vaccine was uncertain.

These cases may be coincidental; however, they suggest a need for more information. The mRNA anti-COVID-19 vaccines are safe, but measuring the BP after vaccination might make them safer. Revaccination control of BP and post-vaccination monitoring, including symptom screening, may be warranted.

## ORCID IDs

Vasilios G. Athyros  <https://orcid.org/0000-0002-0882-8676>  
Michael Doumas  <https://orcid.org/0000-0002-7269-8044>

## Reference

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<sup>1</sup> 2nd Clinic of Internal Medicine, Aristotle University of Thessaloniki, Thessaloniki, Greece

## Corresponding Author:

Vasilios G. Athyros, MD, FESC, FRSRH, FASA, FACS, FRS, 2nd Department of Internal Medicine, Medical School, Aristotle University of Thessaloniki, Hippocrates Hospital, Thessaloniki 55132, Greece.  
Email: vathyros@gmail.com