Since January 2020 Elsevier has created a COVID-19 resource centre with free information in English and Mandarin on the novel coronavirus COVID-19. The COVID-19 resource centre is hosted on Elsevier Connect, the company's public news and information website.

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CONCLUSION Our study confirmed significantly higher mortality in all patients with in-hospital STEMI compared with out-of-hospital STEMI. COVID-19–positive patients with an in-hospital STEMI had a striking mortality of 84.6%.

CATEGORIES CORONARY: Acute Myocardial Infarction

TCT-551
The Effect of the COVID-19 Vaccines on Individuals Who Develop Incidences of Nontraumatic Intracranial Hemorrhages

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BACKGROUND The effect of messenger RNA COVID-19 vaccines on individuals who develop incidences of nontraumatic intracranial hemorrhages is still poorly misunderstood. Previous research from varying sources has indicated the presence of a nontraumatic intracranial hemorrhage in conjunction with exposure to COVID-19. This research aims to understand if a difference exists between nontraumatic hemorrhagic events with those who received the Pfizer, Moderna, and Johnson & Johnson vaccine compared with those who contracted COVID-19 with no previous vaccination.

METHODS The researchers queried TriNetX (COVID-19 Research Network) of 67 health care organizations. They analyzed data from January 1, 2020, to February 14, 2022, and identified 1,467,016 laboratory-confirmed COVID-19 cases that did not receive a COVID-19 vaccine (Pfizer, Moderna, and Johnson & Johnson or any other at the time of their diagnosis). The researchers identified 1,008,708 Pfizer cases with second doses completed, 784,622 Moderna cases with a completed second dose, and 22,094 Johnson & Johnson cases with completed doses. The researchers created 3 different cohorts to assess the endpoints of nontraumatic hemorrhagic events using COVID-19 as a control against the selected vaccine cohorts. A propensity score matching of 1:1 was performed to match on the covariates (age, female, male, hypertension, diabetes, coronary artery disease, and chronic obstructive pulmonary disease). The researchers compared the endpoint of nontraumatic hemorrhagic events within 30 days.

RESULTS A total of 3,292,540 patients were included. Of those 1,467,116 (44.5%) labs confirmed COVID-19 that did not have a record of a COVID-19 vaccine (30.6%), 1,008,708 completed Pfizer case, and 784,622 (23.8%) were given Moderna vaccine, and finally (1.1%) 22,094 were given Johnson & Johnson vaccine. Nontraumatic hemorrhagic events were reduced in Pfizer cases (0.014% vs 0.144%; P < 0.001) (100% risk reduction) compared with lab-confirmed COVID-19 that did not receive a COVID-19 vaccine at 30 days. Moderna cases reduced hemorrhagic events (0.008% vs 0.154%; P < 0.001) (94.6% risk reduction), as did Johnson & Johnson (0.069% vs 0.174%; P = 0.001) (59.7% risk reduction).

CONCLUSION The results illustrate that there is a reduction in nontraumatic hemorrhagic events within 30 days with use of the COVID-19 vaccine.

CATEGORIES CORONARY: Pharmacology/Pharmacotherapy