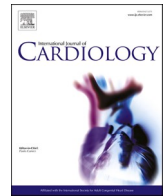




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Letter to the Editor

A fibrinolysis-first strategy for ST-elevation myocardial infarction in the COVID-19 era



ARTICLE INFO

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This commentary refers to ‘Impact of the shift to a fibrinolysis-first strategy on care and outcomes of patients with ST-segment-elevation myocardial infarction during the COVID-19 pandemic—The experience from the largest cardiovascular-specific centre in China’, by W. Leng et al., *Int. J. Cardiol.* 2021; 329: 260–265.

Leng et al. should be commended for presenting ‘real-world’ data on the impact on STEMI care during the first wave of COVID-19 in Beijing, China [1]. However, several issues should be considered to avoid misinterpretation of their results.

An identified but understated element of the study was the limited administration of fibrinolytic therapy amongst the 2020 patient cohort [1]. Only 32 out of 164 (19.5%) eligible patients were actually administered fibrinolytic therapy, with the remainder of patients receiving either no reperfusion or delayed PCI [1]. As such, any as-treated analysis comparing fibrinolysis with primary PCI using this data would not demonstrate the expected inferiority of fibrinolysis [1].

Symptom onset to balloon times were not quantitatively reported. Patients were classified broadly into those presenting within or outside 12 h of symptom onset, thereby making it impossible to accurately assess reperfusion delays and interpret secondary outcomes [2].

Interestingly, the statistical analysis did not distinguish “elective PCI” patients according to those who received successful fibrinolysis followed by PCI later in the index admission versus those who failed to receive timely reperfusion before PCI [1]. This distinction is critical in data interpretation, as patients who did not receive fibrinolysis underwent delayed re-perfusion, and represent a different population to patients who receive early fibrinolytic therapy [3].

Moreover, a multivariate analysis was not performed to account for confounders such as age and Killip class, when investigating associations between re-perfusion strategy and the primary and secondary endpoints [4]. However, in a relatively underpowered study, multivariable regression analysis and propensity matching are unlikely to be informative.

Declaration of Competing Interest

The authors report no relationships that could be construed as a conflict of interest.

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¹ This author takes responsibility for all aspects of the reliability and freedom from bias of the data presented and their discussed interpretation.