CONTEMPORARY TRENDS OF PHARMACOINVASIVE STRATEGY IN PATIENTS WITH ST-SEGMENT ELEVATION MYOCARDIAL INFARCTION IN DIFFERENT REGION OF UNITED STATES: INSIGHTS FROM NATIONWIDE INPATIENT SAMPLE

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Background: Fibrinolytic therapy is still widely used in patients with STEMI. However, transfer for angiography and revascularization within 3-24 hours is currently recommended as part of a pharmacoinvasive strategy.

Methods: We used Nationwide Inpatient Sample databases from 2008 to 2012 to identify all patients’ aged ≥18 years with STEMI who received fibrinolytic therapy and transferred within 24 hours for PCI to another location.

Results: Of 18,819 patients with STEMI treated with fibrinolytic therapy and transferred to a different facility for PCI within 24 hours, only 13,793 (73.29%) patients received PCI and 5,026 (26.71%) were managed conservatively. We observed a decline in the use of PCI among STEMI patients initially treated with fibrinolytic therapy in the Northeast, Midwest and West regions, with the highest decline in the Northeast region from 2008 to 2012. The proportion of patients managed with pharmacoinvasive strategy were 86% in 2008, which decreased to 74.1% in 2012 in the Northeast (p <0.001), from 79.8% in 2008 to 70.4% in 2012 in Midwest (p <0.001) and from 75.3% in 2008 to 70% in 2012 in west (p = 0.011).

Conclusion: Despite the demonstrated benefit of the pharmacoinvasive strategy, a significant number of STEMI patients, initially treated with fibrinolytic therapy, and subsequently transferred to a PCI-capable hospital did not actually receive PCI. Moreover, there seems to be a temporal trend towards decreased use of PCI in this group of patients.