Expeditive catheterization and outcomes in non-ST elevation ACS: results from the Global Registry of Acute Coronary Events

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Background: Recent clinical trials suggest that intermediate- or high-risk patients with NSTEMI or UA have better outcomes when assigned to an invasive strategy when compared with a conservative strategy. The aim of this study was to determine whether timing of catheterization is associated with type of ACS and long-term outcomes in a large unselected population of patients.

Methods and results: A total of 13,325 patients (7236 UA, 6089 NSTEMI) underwent expeditive catheterization (<24 h, n=2423), early catheterization (24-48 h, n=1079) or delayed catheterization (>48 h, n=3003).

In the delayed group, age, previous MI, and TIMI score were significantly higher; whereas NSTEMI and Killip class IV on admission were found more frequently in the expeditive group. Patients who underwent expeditive or early catheterization underwent more aggressive treatment with medications within the first 24 h compared with patients in the delayed group. In-hospital events (death, MI, cardiogenic shock) were more frequent in the expeditive group than the early or delayed groups, whereas recurrent angina was more frequent in the delayed group (Figure); rates of major bleeding rates did not differ. During the 6-month follow-up, new catheterization was scheduled more frequently in the expeditive and early groups than in the delayed group (P<0.0001); the death rate was

significantly higher in the delayed group (5.3%) than the early (3.4%) and expeditive (3.7%) groups. Adjusted multivariate regression analysis revealed that time of catheterization predicted neither the hospital composite endpoint of death, MI, stroke or major bleeding nor death at 6 months.

Conclusions: In this study, the sickest patients were more likely to undergo early cardiac catheterization. Hospital events were more common in the expeditive catheterization group, but recurrent angina was more frequent in the delayed catheterization group.

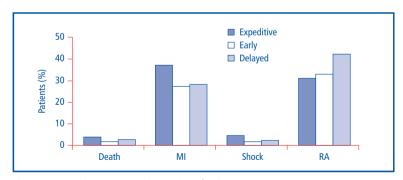


Figure. Hospital outcomes according to time of catheterization.