

i2 SUMMIT

SYSTEMIC BUT NOT LOCAL BLEEDING IS ASSOCIATED WITH LONG-TERM MORTALITY IN PATIENTS WITH ACUTE MYOCARDIAL INFARCTION

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Background: Although bleeding after cardiac catheterization is associated with long-term mortality, whether this association holds for both local bleeding, which could be minimized with improved access technique and closure devices, and systemic bleeding is unknown.

Methods: Within the 24-center TRIUMPH acute myocardial infarction (AMI) registry, we compared long-term mortality among 3,999 patients undergoing cardiac catheterization stratified by systemic, local, or no peri-procedural bleeding. Bleeding was defined as TIMI major, minor or minimal bleeding and was categorized as local (access-site or retroperitoneal) or systemic (gastrointestinal, genito-urinary, other sites). The association between bleeding and 1-year mortality was assessed with Kaplan-Meier analysis and multivariable Cox regression models.

Results: Overall, bleeding occurred in 405 (10.1%) patients. Of these, local bleeding occurred in 277 (6.9%) patients and systemic bleeding in 128 (3.2%). Mortality was highest among those with systemic bleeding (Fig). Adjusted for patient characteristics, systemic bleeding was significantly associated with an increase in 1-year mortality (HR 1.9, 95% CI 1.3-2.8, p=0.002), while local bleeding was not (HR 1.1, 95% CI 0.7-1.7, p=0.63)

Conclusions: Systemic bleeding after cardiac catheterization was associated with increased 1-year mortality, while local bleeding was not. These findings may have important implications for bleeding avoidance strategies among AMI patients.



Cumulative hazard estimates*, by Local vs. Systemic Bleeding

* Nelson-Aalen cumulative hazard estimates