NORTON SCALE FOR PREDICTING PROGNOSIS IN ELDERLY PATIENTS UNDERGOING PRIMARY PERCUTANEOUS CORONARY INTERVENTION FOR ST ELEVATION MYOCARDIAL INFARCTION

Poster Contributions
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Background: The Norton scale is used to assess the risk of developing pressure ulcers, however, recent studies have shown its prognostic utility in elderly patients with diverse medical conditions including among patients undergoing Transcatheter Aortic Valve Implantation (TAVI). The association between low admission Norton scale score (ANSS), complications, and mortality in elderly patients following primary percutaneous coronary intervention (PPCI) has never been studied. We aimed to determine if low ANSS (≤16) is associated with complications, 30-day and long term mortality in elderly STEMI patients undergoing PPCI.

Methods: A retrospective analysis of all consecutive elderly (≥70 years) STEMI patients admitted to the cardiac care unit (CCU) at the Tel-Aviv Medical Center, following PPCI between January 2008 to January 2014. The medical charts were studied for the following measurements: ANSS, demographics, co-morbidities, complications and critical status during hospitalization, 30-day and long term mortality.

Results: Our cohort included 332 consecutive elderly patients: 138 (41.6%) were women; mean age was 78.9±6.1 years. Overall, 99 (29.8%) patients had low ANSS. Following STEMI and PPCI, 20 patients (6%) died within 30 days and 59 died during long term follow up. Low ANSS patients had a significantly higher 30 day (13.3% vs 3.0%; P=0.001) and long term mortality rate (33.3% vs 11.2%; P<0.001). Heart failure and mechanical ventilation were associated with low ANSS, however other complications including bleeding, tachy and bradyarrhythmias and stent thrombosis were not. Cox regression analysis revealed that ANSS≤16 was independently associated with long term mortality (HR 2.85;P=0.001).

Conclusion: Low admission Norton scale score is highly associated with short and long term mortality in elderly STEMI patients treated by PPCI. The Norton scale may therefore be used as an additional prognostic tool among elderly STEMI patients.