Title: IMPACT OF PERSISTENT VS. NON-PERSISTENT CONDUCTION ABNORMALITIES WITHIN 7 DAYS POST TAVR ON MORTALITY: RESULTS OF A SINGLE CENTER PROSPECTIVE REGISTRY

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Background: New onset conduction abnormalities after TAVR are associated with greater long-term mortality. Whether persistent vs. non-persistent new onset abnormalities after TAVR differentially impact outcomes is less known.

Methods: A single center retrospective analysis was done on consecutive TAVR patients at Yale New Haven Hospital from July 2012 to Aug 2019, excluding patients with prior pacemaker (PPM). New onset persistent abnormalities persisted on all electrocardiograms (ECGs) once found post TAVR. New onset non-persistent abnormalities occurred intermittently on ECGs post TAVR. Conduction abnormalities included left and right bundle branch block, intraventricular conduction delay, atrioventricular block, and atrial fibrillation.

Results: A total of 737 patients underwent TAVR, with 396 (54%) developing at least one new onset abnormality ≤ 7 days post TAVR. Of the 396 patients, 47% had at least one non-persistent abnormality and 38% had at least one persistent abnormality. Persistent abnormality patients had a greater 1-year mortality rate (16% vs. 9%, HR of 1.952, 95% CI of 1.004-3.796, p=0.0486) and were more likely to get a PPM (52% vs. 14%, p<0.00001) compared to non-persistent abnormality patients.

Conclusion: Having a persistent abnormality ≤ 7 days post TAVR is associated with greater 1-year mortality and PPM rates compared to having a non-persistent abnormality. Non-persistent patients had similar 30-day and 1-year mortality compared to patients with no new abnormality after TAVR and 14% ultimately received a PPM. Further studies investigating the type and impact of persistent vs. non-persistent abnormalities on outcomes are warranted.