**PRE-TAVR HYPERBILIRUBINEMIA ASSOCIATED WITH POST-TAVR IN-HOSPITAL MORTALITY**

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**Objective:** To determine the prognostic significance of pre-TAVR hyperbilirubinemia.

**Background:**It has been established that preoperative hyperbilirubinemia is associated with increased mortality and morbidity after cardiac surgery. However, hyperbilirubinemia before transcatheter aortic valve replacement (TAVR) has not yet been a subject of clinical research.

**Method:** A retrospective observational study was conducted on 576 consecutive patients who underwent TAVR procedure in a single academic institution between January 2012 and March 2017. Hyperbilirubinemia was defined as any value of total bilirubin ≥1.3 mg/dL immediately prior to TAVR.

**Results:**Fifty-eight patients (10%) had pre-TAVR hyperbilirubinemia. Post-TAVR hospital mortality was 6.9% in patients with preoperative hyperbilirubinemia as compared to 2.1% in the rest of the cohort (p-value = 0.03). Out of the 15 patients who died post-TAVR, 4 (27%) had pre-TAVR hyperbilirubinemia. Pre-TAVR hyperbilirubinemia was more common in younger (78.1 +/- 10 vs. 82.2 +/- 7.8 years old, p-value < 0.001) males (15% vs. 6%, p-value < 0.001) with history of pacemaker (24% vs. 14%, p-value = 0.049) or implantable cardioverter-defibrillator (16% vs. 4%, p-value < 0.001), congestive heart failure (CHF) New York Heart Association (NYHA) class 4 within 2 weeks from TAVR (35% vs. 14%, p-value < 0.001), severe tricuspid regurgitation (14% vs. 4%, p-value = 0.003), and atrial fibrillation or atrial flutter (60% vs. 41%, p-value = 0.004). In the multi-variate logistic regression analysis, age (OR 0.95, 95% CI 0.92-0.99, p-value = 0.008), male (OR 2.33, 95% CI 1.18-4.60, p-value = 0.015), and severe tricuspid regurgitation (OR 2.94, 95% CI 1.08-7.98, p-value = 0.034) were predictive of elevated bilirubin pre-TAVR, but not of post-TAVR mortality.

**Conclusion:**Pre-TAVR hyperbilirubinemia is associated with significantly increased post-TAVR in-hospital mortality. However, demographic factors and clinical parameters associated with elevated pre-TAVR bilirubin do not affect post-TAVR mortality. Additional studies on this prognostic correlation is needed.