



Interventional Cardiology

COMPLETE HEART BLOCK AFTER TRANSCATHETER AORTIC VALVE REPLACEMENT: TRENDS IN INCIDENCE AND IN-HOSPITAL OUTCOMES

Poster Contributions
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Authors: *Ahmed Al-Ogaili, Setri Fugar, Ali Ayoub, Ahmed Kolkailah, Harry Fuentes, John H. Stroger Hospital of Cook County, Chicago, IL, USA*

Background: Complete heart block (CHB) is a frequent complication after transcatheter aortic valve replacement (TAVR). Trends in incidence of CHB, subsequent permanent pacemaker (PPM) implantation, and outcomes of patients with CHB after TAVR are lacking.

Methods: We queried the 2012-2014 national inpatient sample databases to identify all patients who underwent TAVR. Patients with pacemakers or implantable cardioverter-defibrillators were excluded. Association between CHB and outcomes, and overall trends in incidence of CHB, PPM implantation, and inpatient mortality were examined.

Results: Of 35,575 patient who underwent TAVR, 3,685 (10.4 %) had CHB. The incidence of CHB increased from 8.4% in 2012 to 11.8% in 2014 (adjusted odds ratio [OR] per year: 1.21; 95% confidence interval [CI]:1.15-1.27). During the same period, PPM implantation increased from 9.5% to 13.8% (P trend <0.001). Whereas, in-hospital mortality among TAVR patients decreased from 4.9% to 3.9% (adjusted OR per year: 0.87; 95% CI: 0.81-0.93). Patients with CHB had higher odds of in-hospital mortality when compared to patients without CHB (adjusted OR: 1.33; 95% CI: 1.14-1.56). Moreover, CHB was also associated with longer average length of stay (9.22 versus 8.09 days, P<0.001)

Conclusion: The incidence of CHB and PPM implantation after TAVR has increased during the study period. In spite of this increment, mortality rates after TAVR have decreased. CHB is associated with higher in-hospital mortality risk and longer hospital stay.

