

Outcome of Patients with Left Bundle Branch Block after TAVI (Tran aortic Valve Implantment)

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Background:

During or following TAVI, 30% to 50% of patients may develop new LBBB. However, its impact on cardiac prognosis remains unclear.

Objectives:

We evaluated the prognostic impact of new-onset persistent (LBBB) in patients undergoing TAVI.

Methods:

A total of 191 consecutive patients who underwent TAVI with balloon- expandable or self-expandable valves were included. Patients were on continuous electrocardiographic (ECG) monitoring during hospitalization and 12-lead ECG was performed daily until discharge. Follow up was complete at 12 months.

Results:

New-onset LBBB was observed in 25.9% of the patients after TAVI, 13.8 % during the procedure and 18 % remained with LBBB after a year of follow up.

The overall rate of new onset LBBB after TAVI was 25.9%, among patients that Medtronic-CoreValve was implanted, 27.9 % of the them developed new LBBB and 22.4% of those who Edwards-Sapient valve was implanted. (p=0.4).

One year mortality was 1% without LBBB vs. 0 % in patient with LBBB at discharge, (p=NS). The need for a new pacemaker implant after TAVI was 0 % in patients with LBBB vs. 1 % among patients without new LBBB, (p=NS).

Conclusions:

New onset LBBB occurred in ~1\4 of treated patients, it was associated with higher need for pacemaker implants but had no impact upon cardiac prognosis over one year.