

A COMPLICATION OF TRANSCATHETER AORTIC VALVE IMPLANTATION (TAVI)

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Introduction

Transcatheter aortic valve implantation (TAVI) is an alternative treatment option for severe aortic stenosis (AS) patient who are not suitable for surgery. Despite its favorable outcome, TAVI is not free from complications which needs to be monitored post implantation.

Case Report

A 73-year-old lady presented with multiple episodes of syncope associated with lethargy. She is a known case of severe AS and had a TAVI procedure performed a week ago at our hospital. Electrocardiography showed a complete heart block at 35 bpm. Echocardiogram showed no evidence of pericardial effusion, paravalvular leak or aortic dissection. Intravenous dopamine infusion was started in view of her bradycardia and borderline hypotension. A permanent pacemaker was inserted, and she made an uneventful recovery.

Discussion

TAVI is becoming a viable choice for patients with severe AS, especially the elderly with high risk for surgery. The new aortic valve is placed inside the diseased valve percutaneously using a catheter via the femoral artery. This procedure has lower complication, but they do exist, as illustrated in our case. Studies have shown that the rate of pacemaker implantation for Atrio-ventricular block post TAVI occurs in less than 10% of cases at 30 days. Other complications associated with TAVI includes, paravalvular leaking, aortic dissection/perforation, arrhythmias, stroke and cardiac tamponade.

Conclusion

TAVI is becoming a more viable and common mode of therapy for severe AS, due to its better outcome and faster recovery. Emergency Physicians needs to be aware of the potential complications post procedure associated with this new technology.

Keywords: Transcatheter aortic valve implantation, complete heart block, complications