

TAVI outcomes in dialysis patients; the experience of one tertiary referral centre

Dr Jamie Willows¹, Dr Mohammed Abdelmahamoud², Dr Swati Bhagat³, Mr Douglas Muir¹, Dr Stephen Kardasz¹

¹James Cook University Hospital, Middlesbrough, United Kingdom, ²Sunderland Royal Hospital, Sunderland, United Kingdom, ³Cumberland Infirmary, Carlisle, United Kingdom

Transcatheter aortic valve insertion (TAVI) for severe aortic stenosis has emerged as an alternative for patients whose co-morbidities preclude open aortic valve surgery. Aortic stenosis is the most common symptomatic valve lesion in haemodialysis patients, and increased prevalence is observed in this population due to early valvular calcification. Unfortunately, it can contribute to significant symptoms for the patient, and can make achieving high quality haemodialysis challenging. Often dialysis patients have additional co-morbidities and would not be considered suitable for traditional open valve replacement.

Our aim was to review outcomes of all dialysis patients who have undergone TAVI at our referral centre, by means of retrospective case note review. Ten patient on dialysis (8 male, 2 female; 9 HD, 1 PD), had undergone TAVI between 2012 and the present. The average age was 76 years (range 55-87 years), and the average dialysis vintage was 6 years, and every patient had multiple other co-morbidities. All TAVI procedures were done via a transfemoral approach. The median length of stay was 4 days (range 2 to 17 days), though this was somewhat confounded by a case mix of elective procedures and emergency unplanned admissions. Though this was longer when compared to the non-dialysis population undergoing TAVI, it compares favourably with inpatient recovery time for open valve surgery even in patients without kidney failure. Overall symptom burden and/or dialysis tolerability was noted to be improved in most patients post-TAVI. Immediate complications occurred in two patients, one of whom developed an ischaemic leg on the table and required additional emergency vascular surgery, and one of whom had a recurrence of complete heart block post-procedure and required a fitting of a pacemaker, but both of whom did well long-term. Six patients have since died, with mean survival post-TAVI of 28 months in these patients.

Our data are consistent with other studies that show that TAVI is feasible in the dialysis population with correct patient selection, though short term post-operative risk is higher than in the general population. It is important for nephrologists and cardiologists to be aware of the good outcomes of this alternative to open valve surgery for severe aortic stenosis in dialysis patients, in order to be effective patient advocates.