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Long Term Survival Rate of TAVR With and Without Dialysis

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**BACKGROUND / INTRODUCTION**

- Transcatheter aortic valve replacement (TAVR) is an increasingly conventional minimally invasive procedure for high risk patients with severe aortic stenosis.
  - Avoids complications associated with a median sternotomy and the heart lung machine
  - Long-term patient survival and valve durability are not completely known.
- For patients coincidingly on dialysis:
  - Previous studies have illustrated a faster degeneration of the transaortic valve leaflets
  - Regular cost of valve: $32,000 and cost of procedure: $70,000

**OBJECTIVE**

- The study seeks to examine the survival rates of regular and hemodialytic TAVR patients

**METHODS**

- Single-center retrospective review of all TAVR patient from 2012-2017 at the Lehigh Valley Health Network
- The in-house database and electronic medical record were used to assess the patient outcomes. Additional telephone interviews were conducted with patients in the post-operative phase of their care.
- Descriptive statistics were used to evaluate the significance of survival rates of TAVR patients who were coincidingly on dialysis

**RESULTS**

- 530 patients had the TAVR procedure
  - 110 died (20.75%)
  - 11 died within 30 days of the procedure
- 14 patients were coincidingly on dialysis
  - 7 died (50%)
  - \( p = 0.0035 \)
  - \( p \) values <0.05 are statistically significant
  - Worse survival rate by a factor of three
  - Hazard ratio = 2.959; 95% CI 0.8381% to 10.446%
  - Average survival time of 2.02 yrs. (95% CI) PP
  - Median survival time of 0.953 yrs. (95% CI). PP

**CONCLUSIONS**

- TAVR has been successful for non-dialysis patients
- Significant decrease in survival rates for hemodialytic patients should draw caution to the cardiothoracic team as they assess a TAVR candidate.
- Further research is warranted to continue TAVR patient follow up and expand the existing TAVR database.

**REFERENCES**