LONG TERM OUTCOMES FOLLOWING RENAL ARTERY INTERVENTIONS: HIGH CARDIOVASCULAR MORTALITY RATES WITH LOW RATES ATTRIBUTABLE TO KIDNEY DISEASE

Poster Contributions
Hall C
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Session Title: Outcomes of Intervention for PAD and Venous Thromboemboli: Endovascular Therapy
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Background: Obstructive renal artery stenosis (RAS) can lead to hypertension and progressive chronic kidney disease (CKD). While patients with peripheral vascular disease (PVD) suffer from higher rates of cardiovascular complications (5 year mortality of approximately 50%), the rate and causes of death in patients with RAS who share similar cardiovascular risk factors are not well defined.

Methods: We reviewed a consecutive series of patients who underwent renal stenting at our institution between 1/1/2006 and 12/31/2012. The primary outcome was all-cause mortality classified by cause of death. All records were confirmed by death certificate or chart review. The probability of death was estimated by the Kaplan-Meier method.

Results: The series included 285 patients (mean age was 66.5 ±13.6 years and 58% were male). Follow-up was available for 100% patients. The overall mortality rate was 23.7% with a mean survival of 5.8 years (95% CI: 5.5, 6.1). Of the 68 deaths, 40 (58.8%) were cardiovascular (13.2% Acute myocardial infarction, 13.2% Stroke, 11.8% sudden death, 10.3% congestive heart failure) while 28 (41.2%) were non-cardiovascular (10.3% infectious, 8.8% malignancy, 1.5% CKD) (Figure 1).

Conclusions: In RAS patients undergoing renal stenting, the mid to long-term prognosis appears favorable compared with other peripheral vascular disease populations. Acute cardiovascular events are the most common cause of death, with very low rates attributable to progressive CKD.