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PREVALENCE AND IMPACT OF RENAL FAILURE IN OCTOGENARIANS UNDERGOING PERCUTANEOUS CORONARY INTERVENTION

i2 Oral Contributions
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Background: Renal failure is one of the most important predictors of adverse events following percutanous coronary intervention (PCI). We sought to determine the prevalence and impact of impaired creatinine clearance (CC) in octogenarians undergoing PCI.

Methods: We retrospectively analyzed a cohort of consecutive octogenarians who underwent PCI at a tertiary care centre between Jan 2002 and Dec 2007. In-hospital events and clinical follow-up was obtained by chart review and phone interview. Patients were divided in three groups based on baseline CC calculated with the Cocroft-Gault formula (<30mL/min, 30-60mL/min et >60mL/min). We compared in-hospital events, one-year mortality and long term survival using logistic regression and Cox proportional survival analysis.

Results: During the study period 988 octogenarians underwent PCI. All patients with available baseline creatinine (n=885) were included in the present analysis. Long-term follow-up was available in 98% of patients. Chronic renal failure was frequent with 82% of study patients showing a CC < 60mL/min and 15% a CC < 30mL/min. Patients in the lowest CC group were older (85±3.6, 83 ± 3, 82 ±2, p<0.0001), were more frequently females (21% vs 9%, 9%, p<0.0001), more likely to have high blood pressure (82%, 74%, 70%, p=0.04), had lower Hb levels (117± 18g/L, 126±17, 130±16, p<0.001) and had lower LVEF (48±17, 52±14, 53±14, p=0.009). Radial approach was used equally in the three groups (85%, 87%, 92%, p=0.19). Glycoprotein 2b3a inhibitors were less often used in the low CC group (27%, 32%, 41%, p=0.03). TIMI major bleeding was rare and did not differ between the three groups (1.5%, 1.8%, 1.3%, p=0.9). In-hospital mortality was increased in the low CC group (11%, 3.3%, 0.7%, p<0.0001). One-year mortality was also inversely correlated with baseline CC (25%, 12%, 3%, p<0.0001). Long-term survival analysis showed similar **Results:**

Conclusions: Baseline CC is a strong independent predictor of in-hospital and long-term mortality in octogenarians undergoing PCI. Additional investigations are needed to clarify the benefits of PCI in octogenarians with severe renal failure and to develop strategies to improve outcomes in this high-risk group.