

Renal dysfunction predicts poor prognosis with and without left main coronary artery disease in stable angina pectoris

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**Background:** Left main coronary artery disease (LMCAD) has previously been shown to lead to the fatal prognosis in patients with coronary artery disease (CAD). Even though a lot of studies identified risk factors for CAD, factors associated with LMCAD remain unclear. We had reported an impact of renal dysfunction on the presence of LMCAD in patients with stable angina pectoris (SAP). This time we investigated the prognosis in SAP patients. **Methods:** We performed coronary angiogram to 1601 consecutive patients. A total of 626 consecutive SAP patients with significant stenosis were enrolled. Patients with SAP were divided into two groups; LMCAD (n=95) and non-LMCAD (n=531). Significant stenosis was defined as percent luminal reduction >50% in left main trunk and >75% in the other parts. Renal function was measured as an estimated glomerular filtration rate (eGFR) and/or proteinuria, based on the creatinine obtained prior to angiography. **Results:** The LMCAD patients with severe renal dysfunction (eGFR<30) had more clinical events compared to the non-LMCAD patients with normal renal function (eGFR≥60) (hazard ratio, 9.54; 95% confidence interval: 3.15–28.89, p<0.01). The patients with severe renal dysfunction had almost equivalent events with and without LMCAD. **Conclusion:** Renal dysfunction predicts significantly clinical events with and without LMCAD in SAP patients.