

## Clinical Outcomes of PAD Patients Who Underwent Routine Coronary Angiography and Subsequent Percutaneous Coronary Angiography for Severe CAD

**Background:** Patients with peripheral arterial disease (PAD) have a poor prognosis including high mortality rate. Long-term clinical outcomes of symptomatic PAD patients who underwent percutaneous transluminal angioplasty (PTA) who also underwent routine coronary angiography (CAG) and subsequent percutaneous coronary intervention (PCI), if clinically indicated, are not fully elucidated yet. **Methods:** A total of 674 consecutive PAD patients who underwent successful PTA and CAG were enrolled. Coronary artery disease (CAD) was defined as angiographic stenosis  $\geq 70\%$ . Patients were divided into two groups according to the presence of CAD (CAD group: 413 patients, non-CAD group: 261 patients). To adjust for any potential confounders that could cause bias, propensity score matching (PSM) analysis was performed. Clinical outcomes were assessed based upon Kaplan-Meier survival analysis at 5 years follow-up. **Results:** PSM analysis yielded two matched groups (160 pairs,  $n=320$ ) with balanced baseline characteristics. During the 5-year clinical follow-up, there were no differences in the incidence of mortality, myocardial infarction, strokes, peripheral revascularization, or target extremity surgeries between the two groups except for repeat PCI, which was higher in the CAD group than the non-CAD group (9.3% vs. 0.8%,  $P<0.001$ ). **Conclusion:** A strategy of routine CAG and subsequent PCI, if required, appears to be a reasonable strategy for risk reduction of PAD patients. Our results highlight the importance for evaluation for CAD in patients with PAD. A randomized trial is needed to evaluate the clinical benefit of this strategy..