

## **Comparison of coronary artery disease between young and elderly age groups in Sri Lanka: angiogram based retrospective study**

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The risk factors and their relative frequencies vary in between the young and old as the pattern of their coronary artery disease (CAD) and prognosis. To date there is only limited information available on the patterns of CAD in different age groups in Sri Lanka. This study aims to evaluate the pattern of coronary artery involvement by coronary angiography in young ( $\leq 45$  years) and old patients ( $>60$  years) with CAD.

A retrospective observational study was performed at cardiology unit Teaching Hospital Kandy, recruiting all the cardiac angiographic data in 2015. Coronary angiographic results were individually observed by two examiners. The demographic and risk factor data were obtained from the previous medical records.

A total of 1531 coronary angiograms were reviewed. There were 14.1% patients with CAD who were  $< 45$  years old and 30.6 % patients who were  $>60$  years of age. Prevalence of diabetes was 23% in the younger population, whereas it was 40.4% in the older population. In young patients, single vessel disease (SVD) was seen in 31.6% followed by dual vessel disease (DVD) and triple vessel disease (TVD) occurring in 11.3% and 6.5% respectively. Left anterior descending (LAD) was the commonest vessel involved (16.4%) among those with SVD in the younger population. Among the older patients SVD, DVD and TVD was observed in 30.3%, 28% and 26.7% respectively. In the older population, LAD was again the most frequently (17.1%) affected in those with SVD. Left Main Coronary Artery (LMCA) involvements in younger and older populations were 1.9% and 14.7% respectively. Prevalence of chronic total occlusions in younger and older population was 26.9% and 39.7% respectively.

Prevalence of diabetes is more common in elderly population as well as multi-vessel coronary involvement and chronic total occlusions. The occurrence of SVD shows similar frequencies in the younger and older populations.