Abstract

Background: Little is known regarding long-term outcomes related to adverse cardiovascular events and non-cardiovascular events.

Purpose: To describe causes and predictors of short-term, intermediate-term, and long-term mortality after PCI.

Methods: Consecutive men and women admitted for PCI from 2008 to 2011 were prospectively included and followed-up in this cohort study. A pre-established and dedicated follow-up was performed in consultation and by calls to collect outcomes and the exact causes of death. Two independent reviewers adjudicated the events between cardiovascular or non-cardiovascular death. Last detailed cardiovascular and vital status were collected in January 2019.

Results: A total of 3524 patients including 2720 men (77.2%) and 804 women (22.8%) were followed-up for a median time of 7.0 years (IQ1: 5.4 ; IQ3: 7.2). All-cause death occurred for 30.3% (n=1070) of patients in the cohort, in a median time of 2.5 years. Overall, patients were more likely to die from cardiovascular mortality (11.3%) than non-cardiovascular death (6.5%) (log-rank <0.001) and the first year after PCI (3.1 % vs. 2.2 p =0.01), but became non-significant beyond one year. Cancer accounted for one fifth of the overall mortality (21.4% vs. 16.4%, log-rank <0.001). The strongest risk factors for all-cause mortality among time were diabetes (adHR = 1.48 95CI% [1.29 – 1.71], p<0.001), active smoking (adHR = 1.37, 95CI% [1.16 – 1.62]) and chronic kidney disease (adHR = 1.97, 95CI% [2.55 – 3.45], p<0.001).

Conclusion: In this prospective cohort study, cardiovascular death out-passed non-cardiovascular death in patients treated with PCI in the short and intermediate-term but not beyond one year. Cancer accounted for one fifth of the overall mortality.