



Quality of Care and Outcomes Assessment

TEMPORAL TRENDS IN THE CAUSE OF LONG-TERM DEATH AFTER PCI: A 20-YEAR SINGLE-CENTER EXPERIENCE

Poster Contributions

Poster Sessions, Expo North

Monday, March 11, 2013, 9:45 a.m.-10:30 a.m.

Session Title: PCI: Outcomes, Adherence and Appropriateness

Abstract Category: 28. Quality of Care and Outcomes Assessment

Presentation Number: 1288-101

Authors: *Daniel B. Spoon, Peter J. Psaltis, David Holmes, Robert Simari, Bernard Gersh, Ryan Lennon, Issam Moussa, Rajiv Gulati, Mayo Clinic, Rochester, MN, USA*

Background: Cause of long-term death after percutaneous coronary intervention (PCI) is insufficiently characterized.

Methods: We performed a single-center study evaluating the cause of long-term death after first PCI-hospitalization (1991-2010). All patients were contacted 6 mths, 12 mths and yearly after PCI. Cause of death was obtained via next-of-kin and referring providers and clarified by review of records, death certificates (requested for all), and autopsy reports. Two cardiologists reviewed all deaths for accuracy and subclassification. Competing-risks analysis of cause of death after PCI over 3 eras (91-96, 97-03, 04-10) was performed.

Results: 21,122 patients gave consent for research and survived index hospitalization, 6910 (33%) deaths occurred during long-term follow-up. Cause was indeterminable in 13% of deaths. Across eras, there was an increase in age at PCI and risk factor burden (each $p < 0.001$). A marked increase in non-cardiac causes of death was seen across eras (Fig1A). As a proportion of total deaths, cardiac causes decreased (57% 42% 33%) at 3 years post PCI. Moreover, MI and arrhythmic death decreased but heart failure deaths increased over time (Fig1B). In the recent era, within 5 years post-PCI, commonest causes of non-cardiac deaths were cancer (31%), chronic conditions (21%) and vascular (9.4%).

Conclusions: There has been a temporal shift from cardiac to non-cardiac causes of long-term death after PCI. This has implications for patient care and clinical trial design.

Figure 1

