Sex specific impact of prodromal chest pain on pre-hospital delay time during an acute myocardial infarction: Findings from the multicenter MEDEA Study with 619 STEMI patients.

Abstract:
Scarce evidence yields conflicting results regarding the effect of prodromal chest pain (PCP) on pre-hospital delay during an acute myocardial infarction (AMI). We aimed to assess the impact of PCP on delay. Data was collected on 619 ST-elevated MI patients from the multicenter Munich Examination of Delay in Patients Experiencing Acute Myocardial Infarction (MEDEA) study. Patients with any PCP (which was subdivided into undefined PCP, possible and definite angina) within a year before AMI were identified using the Rose questionnaire, administered in bedside interviews. The influence of PCP and its subdivisions (all compared to no PCP) was assessed using logistic regression (with cut-offs of 2 h, 6 h, and a 4-category ordinal outcome). Any type of PCP was reported by men (50.6%) more than women (34.6%) (OR=1.9; 95% CI: 1.3 to 2.8; p=.001). The median delay of patients with PCP was not significantly different to delay in patients with no PCP (p=.327). Prolonged delay times were observed in women with PCPs of lesser degree of cardiac confirmation, while the opposite was observed in men. In women, possible angina was more strongly associated with delay <2 h (OR=6.8; 95% CI=2 to 23.8) than any PCP (OR=2.6; 95% CI=1.2 to 5.7). For men, PCPs of increasing cardiac confirmation are associated with prolonged delay. For women,
PCPs of lesser cardiac confirmation are more likely to lead to prolonged delay. Future studies should investigate mediating factors.