Is denial a maladaptive coping mechanism which prolongs pre-hospital delay in patients with ST-segment elevation myocardial infarction?

During an acute myocardial infarction, patients often use denial as a coping mechanism which may provide positive mood regulating effects but may also prolong prehospital delay time (PHD). However, empirical evidences are still sparse. This cross-sectional study included 533 ST-elevated myocardial infarction (STEMI) patients from the Munich Examination of Delay in Patients Experiencing Acute Myocardial Infarction (MEDEA) study. Data on sociodemographic, clinical and psycho-behavioral characteristics were collected at bedside. The outcome was assessed using the Cardiac Denial of Impact Scale (CDIS) with the median split as cutoff point. A total of 206 (41.8%) STEMI patients were thus classified as deniers. Deniers were less likely to suffer from major depression (p=0.04), anxiety (p=0.01) and suboptimal well-being (p=0.01) compared to non-deniers during the last six months prior to STEMI. During STEMI, they were less likely to perceive severe pain strength (p=0.04) and racing heart (p=0.02). Male deniers were also less likely to perceive shortness of breath (p=0.03) and vomiting (p=0.01). Denial was not associated with overall delay time. However, in the time window of 3 to 24h, denial accounted for roughly 40min extra delay (356 vs. 316.5min p=0.02 n=196). Denial not only contributes to less suffering from...
acute heart related symptoms and negative affectivity but also leads to a clinically significant delay in
the prevalent group.