P4135

Patients with psychiatric disorders have reduced chances of receiving optimal post-arrest cardiovascular management

C.A. Barcella[1], G. Mohr[1], K. Kragholm[2], T.A. Gerds[3], S.E. Jensen[4], C. Polcwiartek[4], M. Wissenberg[1], F.K. Lippert[5], C. Torp-Pedersen[6], L.V. Kessing[7], G.H. Gislason[1], K.B. Sondergaard[1]

[1]Gentofte University Hospital, Department of Cardiology, Copenhagen, Denmark; [2]Aalborg University, Institute of Health, Science and Technology, Aalborg, Denmark; [3]University of Copenhagen, Department of Biostatistics, Copenhagen, Denmark; [4]Aalborg University Hospital, Department of Cardiology, Aalborg, Denmark; [5]University of Copenhagen, Emergency Medical Services: The Capital Region of Denmark, Copenhagen, Denmark; [6]Aalborg University, Department of Health Science and Technology, Aalborg, Denmark; [7]Rigshospitalet - Copenhagen University Hospital, Department of Psychiatry, Copenhagen, Denmark

Funding Acknowledgement: ESCAPE-NET

Introduction: Healthcare disparities between patients with and without a known psychiatric disorder have been documented worldwide. Whether these inequalities also apply to a life-threatening condition such as out-of-hospital cardiac arrest (OHCA) is unknown

Purpose: We aimed to investigate differences in selected in-hospital cardiovascular procedures following OHCA between patients with and without psychiatric disorders.

Methods: We identified adult patients with OHCA of presumed cardiac cause admitted to hospital following OHCA (2001–2015). Patients with psychiatric disorders were identified using hospital diagnoses or redeemed prescriptions for psychotropic drugs and studied both as a single group and separately (three subgroups: severe mental illness [SMI], minor psychiatric disorders, patients who redeemed psychotropic drugs). We calculated age- and gender-standardized incidence rates (SIRs), and relative incidence-rate-ratio (IRR), of cardiovascular procedures during admission post-OHCA in patients with and without psychiatric disorders. Differences in 30-day and 1-year survival were assessed by multiple logistic regression in the overall population and among 2-day survivors who received acute coronary angiography (CAG).

Results: We included 7,288 hospitalized OHCA-patients: 1505 (22.8%) had a psychiatric disorder. Compared with patients without psychiatric disorders, patients with psychiatric disorders had lower SIRs for acute CAG (≤1 days post-OHCA) (IRR 0.51 [95% confidence interval, CI, 0.45–0.57]) (Figure), subacute CAG (2–30 days post-OHCA) (IRR 0.40, [95% CI 0.30–0.52]) and ICD-implantation (IRR 0.67, [95% CI 0.48–0.97]). Lower rates of acute and subacute CAG were still present in subanalyses only including patients with initial shockable rhythm, among those with return of spontaneous circulation upon hospital-arrival and regardless of Charlson score and socioeconomic status. Notably, the difference in CAG-rates between the two groups increased in the recent years. Conversely, we did not detect differences in coronary revascularization (encompassing coronary artery bypass graft and percutaneous coronary intervention) among CAG-patients (IRR 1.11 [95% CI 0.94–1.30]) (Figure). Patients with psychiatric disorders showed lower survival following OHCA, even among 2-day survivors who received acute CAG: odds (OR) of 30-day survival 0.63 (95% CI, 0.48–0.83) and 1-year survival 0.61 (95% CI 0.46–0.81).

Conclusions: Patients with psychiatric disorders had half the probability of receiving acute and subacute CAG and lower chances of ICD-implantation compared to non-psychiatric patients, but, among CAG-patients, same probability of coronary revascularization. Moreover, their survival was lower irrespective of acute angiographic procedures. Our findings show disparities that demand urgent action considering the large burden of cardiovascular morbidity and mortality in patients with psychiatric disorders.