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Title

Multimorbidity in chronic widespread pain and association with adverse outcomes : a study of 6,515 UK Biobank participants

Priority 1 (Research Category)

Pain management

Presenters

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Abstract

Context: Chronic widespread pain is a common significant health problem associated with high disability and increased mortality. Objective: To investigate how the type and number of long-term conditions (LTCs) associate with all-cause mortality and major adverse cardiovascular events (MACE) in people with chronic widespread pain. Study design: Population-based longitudinal cohort study. Dataset: UK Biobank. Population studied: UK Biobank participants aged between 40 and 70 years old who reported chronic widespread pain (CWP) (n=6,515) compared to those who did not report any chronic pain (n=275,963). Outcome measure: Primary outcome measures were risk of all-cause mortality and MACE. Results: 88% of participants with WP had multimorbidity and these individuals were at increased risk of all-cause mortality and MACE. However, after adjusting for demographic and behavioural characteristics, among those with CWP and ≥ 4 LTCs the increased risk of mortality (HR 3.06, 95% CI 2.65 to 3.53) was not different to that experienced by those with ≥ 4 LTCs without chronic pain (HR 3.36, 95% CI 3.11 to 3.62). In contrast, the risk of MACE continued to be raised (HR 4.22 95% CI 3.69 to 4.82) in those with CWP and ≥ 4 LTCs compared to those without chronic pain and ≥ 4 LTCs (HR 3.51, 95% CI 3.26 to 3.78). Interestingly, of the comorbid LTCs studied, epilepsy was most strongly associated with adverse mortality in participants with CWP compared with those without WP or LTCs: a threefold increased risk of all-cause mortality (HR 3.26, 95% CI 1.99 to 5.32). Conclusions: Those with widespread pain and other LTCs are at increased risk of adverse outcomes. These results are relevant for the monitoring and management of patients with widespread pain.