



The Chronic Effects of Neurotrauma Consortium (CENC) multi-centre observational study: Description of study and characteristics of early participants.

Purpose

To describe a new longitudinal study of combat-exposed US service member and Veterans intended to better understand possible chronic and late-life effects of mTBI.

Participants

Early enrollees in growing cohort of participants with prior combat exposure and deployment(s) in Operation Enduring Freedom, Operation Iraqi Freedom or one of their follow-on conflicts.

How was the study conducted?

This is a multi-center observational/longitudinal study. Longitudinal assessments consist of in-person comprehensive testing at least every 5 years, with interval annual telephonic testing. The primary outcome is the composite score on the NIH Toolbox neuropsychological test battery. Assessments also include structured interviews, questionnaires, traditional neuropsychological testing, motor, sensory and vestibular functions, neuroimaging, electrophysiology, genotypes and biomarkers.

Findings

Recruitment is proceeding well on this large-scale, multi-center longitudinal study examining possible mTBI effects with a broad array of outcome measures and mediators such as PTSD. Some preliminary longitudinal analyses will be done by 2019, but complete longitudinal analyses will be deferred to more remote future dates (consistent with the concept of 'late effects') and will depend on continued funding.

Military Impact

Given the high prevalence of mTBI in military duty, it is imperative to understand general long term mTBI effects as well as individual variations. Prior studies have been limited by imprecise and varied methods of identifying and quantifying PCEs and actual mTBI diagnoses. This study is designed to rectify some of these issues. The process described for determining lifetime mTBI history may also help care provision.

Walker W.C., Carne W., Franke L.M., Nolen T., Dikmen S.D., Cifu D.X., Wilson K., Belanger H.G., Williams R. The Chronic Effects of Neurotrauma Consortium (CENC) multi-centre observational study: Description of study and characteristics of early participants. Brain Injury. 2016 ; 30(12): 1469-1480. PubMed: 27834538 <https://www.tandfonline.com/doi/full/10.1080/02699052.2016.1219061>