

Functional brain connectivity and cortical thickness in relation to chronic pain in post-911 veterans and service members with mTBI

Purpose

To examine how chronic pain interference influences functional connectivity of brain regions and cortical thickness among Veterans who experience an mTBI.

Participants

Researchers evaluated 65 post-911 Veterans and service members who experienced an mTBI

How was the study conducted?

Self-reported pain interference with everyday activities was assessed using the TBI-QOL Pain Interference short form. Functional connectivity and cortical thickness were evaluated using MRI. The Bonferroni method was used in the functional connectivity analysis.

Findings

Veterans and Service members who reported more severe pain interference had less functional connectivity between mesial prefrontal cortex and posterior regions of the default mode network and increased cortical thickness.

Military Impact

Chronic pain, particularly experienced by Veterans and service members with mTBIs, has the potential to affect brain structure and function.

Functional Brain Connectivity and Cortical Thickness in Relation to Chronic Pain in Post-911 Veterans and Service Members with mTBI Newsome, Mary; Wilde, Elisabeth; Bigler, Erin; Liu, Qisheng; Mayer, Andrew; Taylor, Brian; Steinberg, Joel; Tate, David; Abildskov, Tracy; Walker, William; Levin, Harvey