CENC Chronic Effects of Neurotrauma Consortium

Mild TBI and Brain Health | Does Mild TBI Affect Combat Veterans' Brain Health?

Researchers conducted a study of combat Veterans, three quarters with concussions, looking at their "Tau Proteins." "Tau proteins" are chemicals found in the saliva and blood that can tell us if the brain is healthy (too many of them can lead to Alzheimer's and Parkinson's disease). The study looked at whether tau protein levels were changed by having concussions and whether tau proteins were related to having symptoms after concussion. Here are the main findings:

- ★ Veterans with 1 or 2 concussions did not have changes in tau protein levels.
- ★ Veterans with 3 or more concussions did have higher tau protein levels.
- ★ Veterans with higher tau protein levels reported more symptoms with thinking, behavior issues, depression, and pain.
- ★ Researchers are now studying whether those Veterans who continue to have higher tau protein levels will develop problems of worsening brain function, such as Parkinson's disease and dementia.



For more information on CENC visit:

http://www.cencstudy.org

Reference:

Kenney, K., Qu, B., Lai, C., Devoto, C., Motamedi, V., Walker, W., Levin, H., Nolen, T., Wilde, E., Diaz-Arrastia, R., & Gill, J. (2018). Higher exosomal phosphorylated tau and total tau among veterans with combat-related repetitive chronic mild traumatic brain injury, *Brain Injury*, 1-9.

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