

Key Points
SummaryGarcia, A., Wilde, E. A., Tate, D., Reljic, T., Kenney, K., Troyanskaya, M., Agyemang, A., Walker, W. C., &
Nakase-Richardson, R. (2021). 787 OSA risk is associated with number of white matter hyperintensities, but
history of mild TBI is not: A LIMBIC-CENC study. Sleep, 44, Supplement_2, page
A307. https://doi.org/10.1093/sleep/zsab072.784

Primary Question this Study Addresses

What is the relationship between obstructive sleep apnea risk, mTBI, and white matter hyper intensities in a military cohort with a history of combat deployment?

Study Findings That Add to Our Knowledge

About 37% of Veterans had white matter hyperintensities (WMHs). Increasing age, female sex, hypertension, diabetes, and higher sleep apnea risk score were associated with higher number of WMHs. A history of lifetime mTBI exposure was not associated with WMH.

Multivariable analyses revealed that only age remained associated with WMH presence. When looking at only those with presence of WMHs, age and obstructive sleep apnea were associated with the amount of WMH.

How Study Evidence Might Be Used in Practice

Consistent with the literature in non-brain injured populations, age was the strongest predictor of WMH presence and number.

In those with identified WMH, OSA risk was a significant predictor of WMH number, while history of mTBI was not.

For more information on assessing and treating sleep, visit:

Resource

To access the study abstract, click here:

Abstract

This work was supported by the Assistant Secretary of Defense for Health Affairs endorsed by the Department of Defense, through the Psychological Health/Traumatic Brain Injury Research Program Long-Term Impact of Military-Relevant Brain Injury Consortium (LIMBIC) Award/W81XWH-18-PH/TBIRP-LIMBIC Lunder Awards No. W81XWH1920067 and W81XWH-13-2-0095, and by the U.S. Department of Veterans Affairs Awards No. 101 CX002097, I01 CX002096, I01 HX003155, I01 RX003444, I01 RX003444, I01 RX003444, I01 RX003442, I01 CX001135, I01 RX01274, I01 RX 002172, I01 RX 002172, I01 RX 002172, I01 RX 002174, I01 RX 002174