

Key Points Summary

Fino PC, Dibble LE, Wilde EA, Fino NF, Johnson P, Cortez MM, Hansen CR, van der Veen SM, Skop KM, Werner JK, Tate DF, Levin HS, Pugh MJV, Walker WC. Sensory Phenotypes for Balance Dysfunction After Mild Traumatic Brain Injury. Neurology. 2022 May 16;99(5):e521–35. doi: 10.1212/WNL.000000000200602. Epub ahead of print. PMID: 35577572; PMCID: PMC9421603.

Primary Question this Study Addresses

How can sensory phenotypes for balance explain heterogeneity in clinical characteristics, symptomatic clusters, functional measures, and injury mechanisms in Service Members and Veterans with mTBI?

Study Findings That Add to Our Knowledge

In this cross-sectional analysis of Long-Term Impact of Military-Relevant Brain Injury Consortium - Chronic Effects of Neurotrauma Consortium data, eight sensory phenotypes based on visual, vestibular and proprioception impairment alone or in combinations were evaluated for balance control.

All eight phenotypes showed differences in symptom severity and physical and cognitive functioning that were generally linear based on the number and severity of impairments.

How Study Evidence Might Be Used in Practice

Our findings provide support for eight sensory phenotypes that affect balance in Veterans and Service Members after mTBI.

More specific phenotyping is needed to inform specific protocols tailored to specific sensory phenotypes, including multimodal protocols targeting the mixed, multisystem sensory phenotypes, that may lead to precision rehabilitation and better outcomes.

For more information on best practice for balance issues:

🏲 Resource

To access the study abstract, click here:

Abstract

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