

Journal of Sports Medicine and Allied Health Sciences: Official Journal of the Ohio Athletic Trainers Association

Volume 3
Issue 1 *Ohio Athletic Trainers' Association*
Special Edition

Article 12

May 2017

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Recommended Citation

Gaines, Amia and Cripps, Andrea (2017) "Effectiveness of Neck Strengthening Exercises on Reducing Brain Injury," *Journal of Sports Medicine and Allied Health Sciences: Official Journal of the Ohio Athletic Trainers Association*: Vol. 3 : Iss. 1 , Article 12.

DOI: <https://doi.org/10.25035/jsmahs.03.01.12>

Available at: <https://scholarworks.bgsu.edu/jsmahs/vol3/iss1/12>

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Effectiveness of Neck Strengthening Exercises on Reducing Brain Injury

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CLINICAL SCENARIO

Mild traumatic brain injuries (mTBI), are serious health conditions affecting athletes. Research has begun to denote that there are detrimental long-term effects of suffering from concussions. Thus advancements to prevent concussions are imperative.

FOCUSED RESEARCH QUESTION

What is the impact of neck strengthening exercises on preventing or reducing the prevalence of concussions?

SUMMARY OF KEY FINDINGS

The literature was searched for research studies that investigated the effects of preventative treatment of patients with isotonic and isometric neck exercises in decreasing mTBIs in comparison to those who received no preventative treatment. The search returned three articles that met the inclusion criteria all of which were included (1 cohort study, 1 clinical review, and 1 descriptive laboratory study).

CLINICAL BOTTOM LINE

There is competing evidence on the effects of neck strength in decreasing mTBIs. Cervical

resistance and stiffness due to increased musculature or cervical inflexibility seems to be the true judge of decreased results in mTBI severity.

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KEY WORDS: *concussion, Mild-traumatic brain injury, preventative exercises, neck strength*