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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.

REFERENCES

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