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Conceptualising and teaching the risk of serious vascular adverse events associated with manual therapy when treating the neck: An overview of a recent International Framework

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Abstract

Vascular pathologies of the head and neck which can present in a similar way to musculoskeletal pain and dysfunction are rare. There is a long history linking manual therapy interventions and neurovascular patient safety incidents with therapeutic interventions. Typically, these reports focus on cervical spine HVT manipulation, but this focus may be misplaced as the associated risk from manual therapy is similar in magnitude to that seen in people who have primary care visits for neck and head pain (Cassidy et al., 2008, 2017). Furthermore, existing data does not support the idea that HVT manipulation influences blood flow. We need to rethink our conceptualisation of risk associated with vascular pathologies to focus on the likelihood of in situ disease and or trauma rather than focus on the inherent risk associated with manipulative procedures.

The presentation will draw on an international framework for the examination of the cervical region for potential vascular pathologies that has been developed by a multi-disciplinary team in order to support clinical reasoning (Rushton et al., 2020). Epidemiology, mechanisms and approaches to discussing risk with patients will be presented.

Cassidy, J. D., Boyle, E., Côté, P., He, Y., Hogg-Johnson, S., Silver, F. L., & Bondy, S. J. (2008). Risk of Vertebrobasilar Stroke and Chiropractic Care. Results of a Population-Based Case-Control and Case-Crossover Study. *Spine*, *33*(4S), 176–183. https://doi.org/10.1016/j.jmpt.2008.11.020

Cassidy, J. D., Boyle, E., Cote, P., Hogg-Johnson, S., Bondy, S. J., & Haldeman, S. (2017). Risk of Carotid Stroke after Chiropractic Care: A Population-Based Case-Crossover Study. *Journal of Stroke and Cerebrovascular Diseases*, *26*(4), 842–850. https://doi.org/10.1016/j.jstrokecerebrovasdis.2016.10.031

Rushton, A., Carlesso, L., Flynn, T., Hing, W., Kerry, R., Rubinstein, S., & Vogel, S. (2020). International Framework for Examination of the Cervical Region for potential of vascular pathologies of the neck prior to Orthopaedic Manual Therapy (OMT) Intervention: International IFOMPT Cervical Framework. In *IFOMPT framework*. https://www.ifompt.org/site/ifompt/IFOMPT Cervical Framework final September 2020.pdf