

COMMENTARY ON ARTICLE “SPINAL MANIPULATIVE THERAPY IS AN INDEPENDENT RISK FACTOR FOR VERTEBRAL ARTERY DISSECTION”

Dr Michael Yelland, MBBS, FAFMM, Senior Lecturer in General Practice
University of Queensland, Hon Sec AAMM.

This paper(3) compares the characteristics of patients from academic stroke centres in California in cases with stroke/TIA due to cervical arterial dissection with controls with stroke/TIA due to other causes. It represents the best attempt yet to investigate the link between cervical manipulation and cervical arterial dissection using a nested case-control design. Seven of 51 cases had had manipulation in the 30 days prior to their stroke/TIA compared with 3 of the 100 controls. Even with the limitations of this study's design it suggests a moderately strong link between manipulation and arterial dissection, more so for the vertebral arteries than the carotid arteries. The commentary on this paper(4) in the same issue of the journal concluded that the risks were very small, but that the fundamental issue was not consent for risk but demonstration of benefit from cervical manipulation.

At present there is no evidence from controlled trials that cervical manipulation has any more than an immediate effect on neck pain. There is however evidence that multimodal therapy, which includes manipulation/mobilisation, is effective in the medium term for neck pain(1). There is also recent evidence that manipulation with or without exercises is effective in the medium and long term for cervicogenic headache(2). Given this evidence, and the widespread availability of manipulation in the community, patients with neck pain and headaches will continue to seek relief from manipulation. Therefore GP's need to be able to answer their questions about the benefits and risks of manipulation for these conditions. How should they respond? An age old trick in marketing a product or service is to quote the odds of its success (or failure) compared with a competing product. Using this approach you can discourage your patient from using manipulation with the information above, telling them that their odds of having a stroke due to artery damage from a neck manipulation are nearly 5 times greater than a stroke from spontaneous artery damage. That sounds impressive (and frightening!). However a more balanced presentation of the data includes information about the absolute risk of an event. For neck manipulation, the risk of a major complication such as stroke is around one per million manipulations. This should be compared with the risk of major complications from NSAID's (most commonly gastrointestinal haemorrhage) of about 3 in 1,000. The next job for the GP might be how to predict which patients are at higher risks of complications with each treatment. Whilst there are fairly well defined risk factors for gastrointestinal haemorrhage from NSAID's, attempts to find valid predictors of cerebrovascular complications of cervical manipulation have been unsuccessful. These additional pieces of information put a different light on two treatments commonly used for neck pain, but better equip the patient in making decisions about treatment.

References

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