Should spinal manipulation for neck pain be abandoned?

Head to Head: Should we abandon cervical spine manipulation for mechanical neck pain?

The effectiveness of spinal manipulation divides medical opinion. On bmj.com today, experts debate whether spinal manipulation for neck pain should be abandoned.

Spinal manipulation is a technique that involves the application of various types of thrusts to the lumbar spine (lower back) or cervical spine (neck) to reduce back pain, neck pain and other musculoskeletal conditions.

Neil O’Connell and colleagues argue that cervical spine manipulation “may carry the potential for serious neurovascular complications” and that the technique is “unnecessary and inadvisable.”

They say that studies “provide consistent evidence of an association between neurovascular injury and recent exposure to cervical manipulation.” Such injuries include vertebral artery dissection (a tear to the lining of the vertebral artery, which is located in the neck and supplies blood to the brain) and stroke.

They point to a Cochrane review of randomised trials of neck manipulation or mobilisation which concluded that as a stand-alone treatment, manipulation provides only moderate short term pain relief versus controls, sham manipulation, or muscle relaxants, and is unlikely to offer meaningful long term benefit for people with neck pain.

Other recent large, high quality trials reinforce this message, suggesting that manipulation is not superior when directly compared with other physical interventions such as exercise, they add.

They argue that, given the equivalence in outcome with other forms of therapy, manipulation seems to be clinically unnecessary. “The potential for catastrophic events and the clear absence of unique benefit lead to the inevitable conclusion that manipulation of the cervical spine should be abandoned as part of conservative care for neck pain,” they conclude.

But David Cassidy and colleagues argue that cervical spine manipulation is a valuable addition to patient care and should not be abandoned.

They point to high quality evidence that “clearly suggests that manipulation benefits patients with neck pain” and raises doubt about any causal (direct) relation between manipulation and stroke.

When combined with recent randomised trial results, “this evidence supports including manipulation as a treatment option for neck pain, along with other interventions such as advice to stay active and exercise,” they say.

However, they acknowledge that, when risk, benefit, and patient preference are considered, “there is currently no preferred first line therapy, and no evidence that mobilisation is safer or more effective than manipulation. Thus the identification of safe and effective interventions for neck pain remains a high priority.”

They conclude: “We say no to abandoning manipulation and yes to more rigorous research on the benefits and harms of this and other common interventions for neck pain.”
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