

Title CHIROPRACTIC THERAPY FOR MUSCULOSKELETAL PAIN

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**Reference** Technology Review Report - 019/2015, online:

http://www.moh.gov.my/index.php/database stores/store view page/30/276

### Aim

To review the effectiveness, safety and cost-effectiveness of chiropractic spinal manipulation therapy as an adjunct treatment for musculoskeletal pain.

### **Conclusions and results**

Sixteen articles from 12 studies full filled the inclusion/exclusion criteria and were included in this review: two systematic reviews (SR), eight randomised controlled/clinical trials (RCT), two case-control studies, two cohort studies, a cross sectional study and a cost analysis study. There was very limited evidence to suggest that chiropractic spinal manipulation as comparable as current treatments such as medication, physiotherapy or back school programme for reduction of musculoskeletal pain (chronic low back pain and neck pain).

Based on the evidence retrieved, mild adverse events were common such as transient exacerbations of symptoms, low pain soreness or stiffness and pain/discomfort were reported after chiropractic spinal manipulation for low back pain. For chiropractic manipulation of cervical spine, mild adverse events such as headache, fainting/dizziness/light-headedness, numbness/ tingling in upper limbs, worsening of neck pain, shoulder/arm pain were common. Although rare, but more serious adverse events may occur such as stroke, vertebrobasilar artery dissection/occlusion and traumatic injury to the head, neck or trunk (dislocation or soft tissue injury, fracture, brain or spinal cord injury, acute cervical disc prolapse and blood vessel injury ) after chiropractic spinal manipulation for neck pain. Evidence also showed that patients with comorbidities such as chronic coagulation defect, inflammatory spondylopathy, osteoporosis, aortic aneurysm and dissection, or long-term use of anticoagulant therapy had higher risk for injury after chiropractic spinal manipulation.

There was no retrievable evidence on the costeffectiveness of chiropractic therapy.

## Recommendations (if any)

Chiropractic therapy may be used as an adjunct to current treatments for musculoskeletal pain (low back pain) who are referred by a physician based on a strict selection criteria. The therapy must be done by a qualified chiropractor. Chiropractic therapy must not be used in any

patients with neck problem as it may induce serious adverse events.

#### Methods

Electronic databases were searched through the Ovid interface: Ovid MEDLINE® In-process and other Non-indexed citations and Ovid MEDLINE® 1948 to present, Embase – 1988 to 1996 to 2015 Week 10. EBM Reviews - Cochrane Central Register of Controlled Trials - January 2015, EBM Reviews - Cochrane Database of Systematic Reviews 2005 to January 2015, EBM Reviews - Health Technology Assessment – 1st Quarter 2015, EBM Reviews - Database of Abstracts of Reviews of Effects - 1st Quarter 2015, EBM Reviews – NHS Economic Evaluation Database 1st Quarter 2015. Searches were also run in PubMed. Google was used to search for additional web-based materials and information. Limits for human study and English full text articles were applied. Last search was conducted on 9 March 2015.

# Further research/reviews required

Study on cost-effectiveness is warranted.

## Written by

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