



Title Axiom DRX 9000-True Non-Surgical Spinal Decompression System
Agency MaHTAS, Health Technology Assessment Section, Ministry of Health Malaysia
Level 4, Block E1, Parcel E, Presint 1,
Federal Government Administrative Center, 62590 Putrajaya, Malaysia
Tel: +603 88831229, Fax: +603 88831230; htamalaysia@moh.gov.my, www.moh.gov.my
Reference Technology Review Report, 007/09.
http://medicaldev.moh.gov.my/uploads/tr_2009/drx9000.pdf

Aim

To determine the safety, effectiveness, and cost effectiveness of a nonsurgical spinal decompression system.

Conclusions and results

Only limited evidence is available to warrant the routine use of the DRX9000 nonsurgical spinal decompression system. The retrieved evidence is inconclusive due to conflicting results from the randomized controlled trials in the systematic review and the low level of evidence from the phase II nonrandomized controlled trial and audit chart. This may be due, in part, to heterogeneous patient groups and the difficulties involved in properly blinding patients to the mechanical pulling mechanism. Scientifically more rigorous studies with better randomization, control groups, and standardized outcome measures are needed to overcome the limitations of past studies.

Recommendations

The evidence was insufficient to support safety and effectiveness. However, the potential for the DRX9000 nonsurgical decompression system looks promising. Further prospective clinical studies are needed to validate clinical and radiographic improvement in patients with chronic low back pain. In view of the above, the DRX9000 nonsurgical decompression system can be recommended only for research purposes.

Methods

A systematic review was conducted. PubMed, Ovid, and MEDLINE were searched using the following keywords: low back pain, mechanical or motorized traction, traction, treatment outcome, nonsurgical spinal decompression, Decompression Therapy System (DTS), DRX 9000, VAX-D, effectiveness, and adverse events either singly or in combination. The search was limited to human studies published from 2000 through 2008. In addition, the websites of HTA agencies and societies were searched, and the articles retrieved were cross-referencing according to the topic. Although 30 articles were

retrieved from the search, only 4 studies (1 systematic review, 1 narrative review, 1 pilot study, and 1 retrospective chart audit) were included in this review.

Further research/reviews required

Further prospective clinical studies are needed to validate clinical and radiographic improvement in patients with chronic low back pain. To acquire better quality evidence, more clinical trials are warranted in this area.