TITLE: Compressible Non-Articulating Disc Prostheses in Adult Patients with Degenerative Disc Disease: Clinical Effectiveness, Safety, Cost-Effectiveness, and Guidelines

DATE: 24 January 2014

RESEARCH QUESTIONS

1. What is the clinical effectiveness of compressible non-articulating disc prostheses in adult patients with degenerative disc disease?
2. What is the evidence regarding the safety of compressible non-articulating disc prostheses in adult patients with degenerative disc disease?
3. What is the cost-effectiveness of using compressible non-articulating disc prostheses in adult patients with degenerative disc disease?
4. What are the guidelines associated with the use of compressible non-articulating disc prostheses in adult patients with degenerative disc disease?

KEY MESSAGE

One systematic review, four randomized controlled studies, 30 non-randomized studies, and two evidence-based guidelines were identified regarding the use of compressible non-articulating disc prostheses in adult patients with degenerative disc disease. Four of the identified citations, all non-comparative non-randomized studies, were specific to the M6 disc. No relevant health technology assessment reports or economic evaluations were identified.

METHODS

A limited literature search was conducted on key resources including PubMed, The Cochrane Library (2014, Issue 1), University of York Centre for Reviews and Dissemination (CRD) databases, Canadian and major international health technology agencies, as well as a focused Internet search. No filters were applied to limit the retrieval by study type. Where possible, retrieval was limited to the human population. The search was also limited to documents.
published between January 1, 2009 and January 17, 2014. Internet links were provided, where available.

RESULTS

Rapid Response reports are organized so that the higher quality evidence is presented first. Therefore, health technology assessment reports, systematic reviews, and meta-analyses are presented first. These are followed by randomized controlled trials, non-randomized studies, economic evaluations, and evidence-based guidelines.

One systematic review, four randomized controlled studies, 30 non-randomized studies, and two evidence-based guidelines were identified regarding the use of compressible non-articulating disc prostheses in adult patients with degenerative disc disease. Four of the identified citations, all non-comparative non-randomized studies, were specific to the M6 disc. No relevant health technology assessment reports or economic evaluations were identified. Additional references of potential interest are provided in the appendix.

Health Technology Assessments
No literature identified.

Systematic Reviews and Meta-analyses

M6 disc
No literature identified.

Other discs


Randomized Controlled Trials

M6 disc
No literature identified.

Other discs


PubMed: PM21596740

PubMed: PM21150665

Non-Randomized Studies

Comparative Studies – M6 disc
No literature identified.

Comparative Studies – Other discs

PubMed: PM21336970

PubMed: PM20711843

PubMed: PM20568921

Non-Comparative Studies – M6 disc


Non-Comparative Studies – Unclear if M6 disc was used


Non-Comparative Studies – Other discs


Economic Evaluations
No literature identified.

Guidelines and Recommendations


APPENDIX – FURTHER INFORMATION:

Pooled Analyses

*M6 disc*

No literature identified.

*Other discs*


Additional References

