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Title **Exogen Therapy**

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Reference Technology Review Report-014/2011, http://www.moh.gov.my/technology_reviews/195

Aim

To assess the safety, effectiveness, and cost-effectiveness of Exogen therapy for the treatment of nonunion in fractures.

Conclusions and results

There was a limited but fair level of evidence to show the safety of Exogen therapy. No device-related, adverse events were found and there was no retrievable evidence on the CE mark for this technology. There was a lack of consistent and good level of evidence from controlled trials to suggest the effectiveness of Exogen therapy for the treatment of nonunion in fractures. An economic evaluation review revealed that by adding Exogen therapy (ultrasound) for treating both nonunions and fresh fractures, a total cost saving of 20-40% per patient could be realised. However, many of the included studies were decision analysis, which are based on secondary data and multiple assumptions.

Recommendations

Exogen therapy demonstrated potential use for the treatment of nonunion in fractures and can be recommended to be used for research purposes, only adjunct to conventional therapies for delayed or nonunion in fractures.

Methods

Electronic databases were searched, which included PubMed, Medline, Journal @ Ovid full text via OVID, OVID EBM Reviews - Cochrane central register of controlled trials, EBM Reviews - Cochrane database of systematic review, Horizon scanning databases - Centre, Birmingham, Australia and New Zealand Horizon Scanning (ANZHSN), FDA website, MHRA website and from non scientific database - Google search engine. In addition, a cross-referencing of the articles retrieved was also carried out. Relevant articles were critically appraised and evidence was graded using the US/Canadian Preventive Services Task Force Level of Evidence (2001).

Further research/reviews required

More research to provide high quality scientific evidence particularly to demonstrate cost-effectiveness over other conventional treatment procedures is warranted.

Written by

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