



Title	Shockwave Therapy System for Musculoskeletal Disorders
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Reference	Technology Review Report, 002/09. http://medicaldev.moh.gov.my/uploads/tr_2009/shockwave.pdf

Aim

To determine the safety, effectiveness, and cost effectiveness of shock wave therapy systems in rehabilitating musculoskeletal disorders, specifically for elbow pain, shoulder calcific tendinitis, and heel pain.

Conclusions and results

The evidence was sufficiently strong to support the effectiveness of shock wave therapy in treating shoulder calcific tendinitis. Evidence also showed that extracorporeal shockwave therapy (ESWT) is more cost effective compared to surgery for shoulder calcific tendinitis. However, evidence remains inconclusive as regards the effectiveness of ESWT in treating lateral elbow pain. ESWT for heel pain appears to offer only marginal gains over placebo or other therapy. Evidence also showed that ESWT is a safe treatment. Minor side effects were reported with high-energy ESWT, but all of the side effects were self-limiting.

Recommendations

Shock wave therapy is recommended for treating shoulder calcific tendinitis. As for other clinical indications, more clinical research is warranted to establish its effectiveness. However, the limited scope of the evidence does not lend support towards purchasing shock wave therapy systems to treat just one specific condition for which conservative and surgical treatment options are already available locally.

Methods

The literature search of electronic databases included: MEDLINE, Cochrane Library, Science Direct, and general databases, eg, Google and Yahoo.

The search strategy used the following terms, either alone or in various combinations:

(shock wave therapy OR shockwave therapy OR extracorporeal shockwave therapy OR ESWT) AND (musculoskeletal disorders OR MSK OR musculoskeletal OR lateral epicondylitis OR tennis elbow OR plantar

fasciitis OR heel pain OR shoulder calcific tendonitis OR shoulder calcific tendinitis). The search was limited to articles on humans. No language limitations were imposed on the search. A critical appraisal of all relevant literature was performed using Critical Appraisal Checklist Project (CASP) checklists, and the evidence was graded according to the US/Canadian Preventive Services Task Force Level of Evidence (2001).

Further research/reviews required

None.