Acupuncture and musculoskeletal diseases.

Clinical Trial

1. J Altern Complement Med. 2012 Oct;18(10):946-52. doi: 10.1089/acm.2011.0142. Epub 2012 Aug 8.

The effect of interactive neurostimulation therapy on myofascial trigger points associated with mechanical neck pain: a preliminary randomized, sham-controlled trial.

Schabrun SM, Cannan A, Mullens R, Dunphy M, Pearson T, Lau C, Chipchase LS.

Source

School of Health and Rehabilitation Sciences, The University of Queensland, St. Lucia, Australia. s.schabrun@uq.edu.au

Abstract

OBJECTIVES:

This trial was conducted to assess the effectiveness of interactive neurostimulation (INS) therapy on the treatment of pain associated with myofascial trigger points (MTPs) in adults with mechanical neck pain.

DESIGN:

This was a preliminary, randomized, sham-controlled trial.

SETTING:

The trial was conducted in a tertiary-care institution.

SUBJECTS:

The participants were 23 adults with pain and MTPs in the neck or shoulder lasting>2 weeks.

INTERVENTIONS:

INS (active or sham) was delivered for 10 minutes in a single session over the MTP area in each patient.

OUTCOME MEASURES:

Immediately following the intervention, subjects were tested for pressure pain thresholds (PPTs) and 10-cm visual analogue scale score (VAS) for pain intensity. At the 5 day follow-up, two additional tests were performed: the neck disability index (NDI) and the patient specific functional scale (PSFS) for function.

RESULTS:

Improvements in function (PSFS) were observed in the treatment group, which were of clinical significance in selected subjects. These effects were statistically greater than those obtained in the sham group but were overall not at a level of clinical significance in this small population. Improvements in pain intensity (VAS) and neck disability (NDI) were observed in both the treatment and sham groups, indicating that INS had no greater benefit using these measures. There was no change in PPTs following either the active or sham treatment.

CONCLUSIONS:

INS is a new and emerging therapy, which may be efficacious for managing musculoskeletal conditions, such as myofascial pain syndrome. This study demonstrated improvements in function in individuals with MTPs following INS therapy, which may be of clinical significance in certain patients with neck or shoulder pain. Further large-scale clinical trials are required to confirm this effect and to determine if INS also reduces pain and neck disability.

PMID:

22873210

[PubMed - indexed for MEDLINE]

2. Trials. 2012 Jul 9;13:107.

The optimized acupuncture treatment for neck pain caused by cervical spondylosis: a study protocol of a multicentre randomized controlled trial.

Liang ZH, Di Z, Jiang S, Xu SJ, Zhu XP, Fu WB, Lu AP.

Source

Research Team of Acupuncture Effect and Mechanism, Guangdong Provincial Academy of Chinese Medical Sciences, Guangzhou 510120, China.

Abstract

BACKGROUND:

Neck pain is one of the chief symptoms of cervical spondylosis (CS). Acupuncture is a well-accepted and widely used complementary therapy for the management of neck pain caused by CS. In this paper, we present a randomized controlled trial protocol evaluating the use of acupuncture for CS neck pain, comparing the effects of the optimized acupuncture therapy in real practice compared with sham and shallow acupuncture.

METHODS/DESIGN:

This trial uses a multicentre, parallel-group, randomized, sham acupuncture and shallow acupuncture, controlled single-blind design. Nine hospitals are involved as trial centres. 945 patients who meet inclusion criteria are randomly assigned to receive optimized acupuncture therapy, sham acupuncture or shallow acupuncture by a computerized central randomization system. The interventions past for 4 weeks with eight to ten treatments in total. The group allocations and interventions are concealed to patients and statisticians. The Northwick Park Neck Pain Questionnaire (NPQ) is used as the primary outcome measure, and the McGill Pain Questionnaire (MPQ) and The Short Form (36) Health Survey (SF-36) are applied as secondary outcome measures. The evaluation is performed at baseline, at the end of the intervention, and at the end of the first month and the third month during follow-up. The statistical analyses will include baseline data comparison and repeated measures of analysis of variance (ANOVA) for primary and secondary outcomes of group and time differences. Adverse events (AEs) will be reported if they occur.

DISCUSSION:

This trial is a multicentre randomized control trial (RCT) on the efficacy of acupuncture for CS neck pain and has a large sample size and central randomization in China. It will strictly follow the CONSORT statement and STRICTA extension guideline to report high-quality study results. By setting the control groups as sham and shallow acupuncture, this study attempts to reveal the effects of real acupuncture versus placebo or non-classic acupuncture treatment and evaluate whether classic Chinese medical acupuncture is effective on CS neck pain. This study will provide evidence for the effects of acupuncture on CS neck pain.

TRIAL REGISTRATION:

Chinese Clinical Trial Registry: ChiCTR-TRC-00000184.

PMID:

22776567

[PubMed - indexed for MEDLINE]

PMCID:

PMC3460740

3. Complement Ther Med. 2012 Jun;20(3):131-4. doi: 10.1016/j.ctim.2011.12.006. Epub 2012 Jan 9.

Acupuncturefor symptoms of Gaucher disease.

Samuels N, Elstein D, Lebel E, Zimran A, Oberbaum M.

Source

Center for Integrative Complementary Medicine, Shaare Zedek Medical Center, Jerusalem, Israel. refplus@netvision.net.il

Abstract

OBJECTIVE:

The purpose of this study was to examine the effect of acupuncture on bone/joint pain, headache and fatigue, as well as quality of life in patients with Gaucher disease (GD), within the framework of an integrated treatment programme.

METHODS:

Patients with GD suffering from any of the above symptoms were offered a series of 10-12 weekly acupuncture treatment sessions. Prior to initiation of treatment, participants were asked to score the severity of pain, as well as to complete the Functional Assessment of Chronic Illness Therapy-Fatigue measure (FACIT-F) and the Medical Outcomes Study (MOS) Short-Form (SF) questionnaire. These tools were evaluated again at the end of the treatment period.

RESULTS:

A total of 12 patients were evaluated. While the only pain outcome reduced by acupuncture was knee pain, a significant improvement was observed with respect to nearly all FACIT-Fatigue measures, including the Physical Well Being (PWB) subscales and the SF-12 Physical Composite Score (PCS), though not for the Mental Composite Score (MCS). Patients reported satisfaction with the treatment process, and no significant side effects were reported.

CONCLUSION:

Acupuncture may play a beneficial role for patients with GD when used in conjunction with conventional therapy, reducing fatigue and improving physical function. The preliminary finding of this observational study should encourage further research.

PMID:
22500662
[PubMed - indexed for MEDLINE]

4. Pain. 2012 Feb;153(2):455-62. doi: 10.1016/j.pain.2011.11.007. Epub 2011 Dec 12.

Practice, practitioner, or placebo? A multifactorial, mixed-methods randomized controlled trial of acupuncture.

White P, Bishop FL, Prescott P, Scott C, Little P, Lewith G.

Source

Faculty of Health Sciences, University of Southampton, Highfield, Southampton, UK. pjw1@soton.ac.uk

Abstract

The nonspecific effects of acupuncture are well documented; we wished to quantify these factors in osteoarthritic (OA) pain, examining needling, the consultation, and the practitioner. In a prospective randomised, single-blind, placebo-controlled, multifactorial, mixed-methods trial, 221 patients with OA awaiting joint replacement surgery were recruited. Interventions were acupuncture, Streitberger placebo acupuncture, and mock electrical stimulation, each with empathic or nonempathic consultations. Interventions involved eight 30-minute treatments over 4 weeks. The primary outcome was pain (VAS) at 1 week posttreatment. Face-to-face qualitative interviews were conducted (purposive sample, 27 participants). Improvements occurred from baseline for all interventions with no significant differences between real and placebo acupuncture (mean difference -2.7 mm, 95% confidence intervals -9.0 to 3.6; P=.40) or mock stimulation (-3.9, -10.4 to 2.7; P=.25). Empathic consultations did not affect pain (3.0mm, -2.2 to 8.2; P=.26) but practitioner 3 achieved greater analgesia than practitioner 2 (10.9, 3.9 to 18.0; P=.002). Qualitative analysis indicated that patients' beliefs about treatment veracity and confidence in outcomes were reciprocally linked. The supportive nature of the trial attenuated differences between the different consultation styles. Improvements occurred from baseline, but acupuncture has no specific efficacy over either placebo. The individual practitioner and the patient's belief had a significant effect on outcome. The 2 placebos were equally as effective and credible as acupuncture. Needle and

nonneedle placebos are equivalent. An unknown characteristic of the treating practitioner predicts outcome, as does the patient's belief (independently). Beliefs about treatment veracity shape how patients self-report outcome, complicating and confounding study interpretation.

5. Trials. 2011 Oct 13;12:226. doi: 10.1186/1745-6215-12-226.

Effectiveness of heat-sensitivemoxibustion in the treatment of lumbar disc herniation: study protocol for a randomized controlled trial.

Chen M, Chen R, Xiong J, Yi F, Chi Z, Zhang B.

Source

The Affiliated Hospital of Jiangxi University of TCM, Nanchang, Jiangxi, PR China.

Abstract

BACKGROUND:

Lumbar disc herniation is a common and costly problem. Moxibustion is employed to relieve symptoms and might therefore act as a therapeutic alternative. Many studies have already reported encouraging results in heat-sensitive moxibustion for lumbar disc herniation. Hence, we designed a randomized controlled clinical trial to investigate the effectiveness of heat-sensitive moxibustion compared with conventional moxibustion.

METHODS:

This trial is a multicenter, prospective, randomized controlled clinical trial. The 316 eligible patients are randomly allocated to two different groups. The experimental group is treated with heat-sensitive moxibustion (n = 158); while the control group (n = 158) is treated with conventional moxibustion. The moxibustion locations are different for the groups. The experimental group selects heat-sensitization acupoints from the region which consists of bilateral Da Changshu (BL25) and Yao Shu (Du2). Meanwhile, fixed acupoints are used in control group; patients in both groups receive 18 sessions in 2 weeks.

DISCUSSION:

The study design guarantees a high internal validity for the results. It is one large-scale randomized controlled trial to evaluate the efficacy of heat-sensitive moxibustion compared to conventional moxibustion and may provide evidence for this therapy as a treatment for moderate and severe lumbar disc herniation. Moreover, the result may uncover the inherent laws to improve the therapeutic effect with suspended moxibustion.

PMID:
21995679
[PubMed - indexed for MEDLINE]
PMCID:
PMC3206433

Free PMC Article
Related citations

6. Foot Ankle Spec. 2011 Aug;4(4):226-34. doi: 10.1177/1938640011407320.

Treatment of plantar fasciitis in recreational athletes: two different therapeutic protocols.

Karagounis P, Tsironi M,Prionas G, Tsiganos G, Baltopoulos P.

Source

Laboratory of Functional Anatomy and Sports Medicine, University of Athens, Greece. kateneiderer@hotmail.com

Abstract

Plantar fasciitis (PF) commonly causes inferior heel pain and occurs in up to 10% of the US population. Treatment protocols in most studies include the use of ice therapy, nonsteroidal anti-

inflammatory drugs (NSAIDs), and stretching and strengthening protocols. The aim of the current study was to examine the effectiveness of 2 different therapeutic approaches on the treatment of PF in recreational athletes using the Pain and Disability Scale for the evaluation. A total of 38 participants with PF were randomly allocated to 2 different groups of 19 male participants in each group. Group 1 was treated with ice, non-steroidal anti-inflammatory medication, and a stretching and a strengthening program. Group 2 received the same therapeutic procedures as group 1, reinforced by acupuncture treatment. The primary outcomes, nominated a priori, were pain description and mobility-function at 1 and 2 months. Outcomes were measured with the pain scale for PF. The mean total score of the acupuncture group at the third measurement was statistically minor compared with the mean total score of the first group. Acupuncture should be considered as a major therapeutic instrument for the decrease of heel pain, combined with traditional medical approaches.

PMID:
21868796
[PubMed - indexed for MEDLINE]

7. J Altern Complement Med. 2012 Sep;18(9):818-23. doi: 10.1089/acm.2011.0457.

Acupuncture for shoulder painafter stroke: a systematic review.

Lee JA, Park SW, Hwang PW, Lim SM, Kook S, Choi KI, Kang KS.

Source

Department of Motor & Cognitive Rehabilitation, Korea National Rehabilitation Research Institute, Seoul, Republic of Korea.

Abstract

OBJECTIVES:

Shoulder pain, for which acupuncture has been used, is a common complication after a stroke that interferes with the function of the upper extremities. The aim of this systematic review is to summarize and evaluate the effects of acupuncture for shoulder pain after stroke.

METHODS:

Randomized controlled trials (RCTs) involving the effects of acupuncture for shoulder pain, published between January 1990 and August 2009, were obtained from the National Libraries of Medicine, MEDLINE(®), CINAHL, AMED, Embase, Cochrane Controlled Trials Register 2009, Korean Medical Database (Korea Institute of Science Technology Information, DBPIA, KoreaMed, and Research Information Service System), and the Chinese Database (China Academic Journal).

RESULTS:

Among the 453 studies that were obtained (300 written in English, 137 in Chinese, and 16 in Korean), 7 studies met the inclusion criteria for this review. All of them were RCTs published in China and reported positive effects of the treatment. The quality of the studies was assessed by the Modified Jadad Scores (MJS) and the Cochrane Back Review Group Criteria List for Methodologic Quality Assessment of RCTs (CBRG); the studies scored between 2 and 3 points on MJS, and between 4 and 7 points on CBRG.

CONCLUSIONS:

It is concluded from this systematic review that acupuncture combined with exercise is effective for shoulder pain after stroke. It is recommended that future trials be carefully conducted on this topic.

PMID:

22924414

[PubMed - indexed for MEDLINE]

PMCID:

PMC3429280

Free PMC Article

8. Complement Ther Med. 2012 Oct;20(5):364-74. doi: 10.1016/j.ctim.2012.05.002. Epub 2012 Jun 6.

Costs and consequences of acupuncture as a treatment for chronic pain: a systematic review of economic evaluations conducted alongside randomised controlled trials.

Ambrósio EM, Bloor K, MacPherson H.

Source

Department of Health Sciences, University of York, Heslington, York, UK.

BACKGROUND:

The economic burden that chronic pain conditions impose on individuals and society is significant. Acupuncture appears to be a clinically effective treatment for some chronic pain conditions. Given the need for policy decisions to be informed by economic evaluations, the objective of this systematic review was to synthesise data from economic evaluations to determine whether acupuncture for the treatment of chronic pain conditions is good value for money.

METHODS:

A literature search was conducted using health and economics databases, with additional hand-searching. Economic evaluations conducted alongside randomised controlled trials were eligible.
RESULTS:
Eight economic evaluations were included in this review, seven cost-utility analyses and one cost-effectiveness analysis. Conditions treated included low back pain, neck pain, dysmenorrhoea, migraine and headache, and osteoarthritis. From the seven cost-utility analyses, acupuncture was found to be clinically effective but cost more. The cost per quality adjusted life year (QALY) gained ranged from £2527 to £14,976 per QALY, below the commonly quoted threshold used by the UK National Institute for Health and Clinical Excellence of £20,000 to £30,000. The one cost-effectiveness study indicated that there might be both clinical benefits and cost savings associated with acupuncture for migraine. There was heterogeneity across the eight trials in terms of professional who provided the acupuncture, style of acupuncture, and country of origin.
CONCLUSION:
The cost per QALY gained in all seven cost-utility studies was found to be below typical thresholds of willingness to pay. Acupuncture appears to be a cost-effective intervention for some chronic pain conditions.

PMID:
22863652
[PubMed - indexed for MEDLINE]

9. PM R. 2012 May;4(5 Suppl):S122-33. doi: 10.1016/j.pmrj.2012.01.012.

Complementary and alternative medicine in osteoarthritis.

De Luigi AJ.

Source
Department of Rehabilitation Medicine, National Rehabilitation Hospital, Georgetown University Hospital, Washington, DC 20010, USA. ajweege@yahoo.com
Abstract
The intent of this focused clinical review is to assess the current literature on a variety of complementary and alternative medicine treatments for osteoarthritis. This review assesses acupuncture techniques, moxibustion, transcutaneous electrical nerve stimulation, low-level laser therapy, and massage. These treatment methods are growing in popularity among the general public. It is important that providers become aware of the existing literature regarding the efficacy of these alternative methods for the treatment of osteoarthritis to adequately respond to the inquiries of our patients.

PMID:
22632691
[PubMed - indexed for MEDLINE]
Related citations

10. Saudi Med J. 2012 May;33(5):526-32.

Needle acupuncture for osteoarthritis of the knee. A systematic review and updated meta-analysis.

Cao L, Zhang XL, Gao YS, Jiang Y.

Source
Department of Orthopedic Surgery, Shanghai Sixth People's Hospital, Shanghai Jiaotong University, Shanghai, People's Republic of China.
Abstract
OBJECTIVE:

To evaluate the efficacy of treatment with acupuncture for knee osteoarthritis.
METHODS:
We searched PUBMED, EMBASE, and the Cochrane Central Register of Controlled Trials databases from July to October 2011 for randomized controlled trials that compared needle acupuncture with sham acupuncture, standard care, or waiting list control groups in patients with knee osteoarthritis. Of the 490 potentially relevant articles, 14 RCTs involving 3,835 patients were included in the meta-analysis. Two authors independently extracted outcome data on short-term and long-term pain and functional measures.
RESULTS:
Standardized mean differences and 95% confidence intervals were calculated using the mean differences in improvements from baseline and the associated standard deviations in patients assigned to acupuncture and those assigned to control groups according to measurement time points. Compared with sham acupuncture control treatment, acupuncture was significantly better at relieving pain (p=0.002) and restoring function (p=0.01) in the short-term period, and relieving pain (p=0.06) and restoring function (p=0.06) in the long-term. Compared with the standard care and waiting list control treatments, acupuncture was significantly better at relieving pain and restoring function.
CONCLUSION:
Acupuncture provided significantly better relief from knee osteoarthritis pain and a larger improvement in function than sham acupuncture, standard care treatment, or waiting for further treatment.
PMID:
22588814
[PubMed - indexed for MEDLINE]

11. Rheumatol Int. 2012 Oct;32(10):2969-78. Epub 2012 Mar 30.
Moxibustion for the treatment of osteoarthritis: a systematic review and meta-analysis.
Choi TY, Choi J, Kim KH, Lee MS.
Source
Medical Research Division, Korea Institute of Oriental Medicine, Daejeon 305-811, South Korea.
The aim of this review was to summarise and critically evaluate the evidence from randomised clinical trials (RCTs) of moxibustion as a treatment for patients with osteoarthritis (OA). Twelve databases were searched from their inception through July 2011. RCTs were considered whether they assessed any type of clinical outcome from moxibustion therapy for patients with OA localised to any joints. Two reviewers independently performed the selection of studies, data abstraction and validations. The risk of bias was assessed using the Cochrane criteria. Eight RCTs met our inclusion criteria, and most of them had significant methodological weaknesses. Six RCTs tested the effects of moxibustion against conventional oral drug therapies in patients with knee OA (KOA). Meta-analysis showed favourable effects of moxibustion on the response rate (n = 540; RR, 1.09; 95 % CI 1.03-1.17; P = 0.005; heterogeneity: $\chi(2) = 5.48$, P = 0.36, I (2) = 9 %). Two RCTs tested the effects of moxibustion on response rate after 2 months. The meta-analysis failed to show favourable effects of moxibustion (n = 180; RR, 1.10; 95 % CI 0.97-1.24; P = 0.13; heterogeneity: $\chi(2) = 0.03$, P = 0.87, I (2) = 0 %). In conclusion, consistent results show that moxibustion may be effective in symptom management in patients with KOA. However, because of the number of eligible RCTs and the high risk of bias in the assessment of the available RCTs, the evidence supporting this conclusion is limited.
PMID:
22461183
[PubMed - indexed for MEDLINE]

12. Nurs Times. 2012 Feb 21-27;108(8):25-7.

Osteoarthritis 2: pain management and treatment strategies.

Swift A.

Source

University of Birmingham.

Abstract

Osteoarthritis (OA) is a painful, progressive joint disorder. This article discusses pharmacological management of OA, such as non-steroidal anti-inflammatory drugs and opioids, and non-pharmacological management, including weight reduction, acupuncture and joint replacement surgery. The third part, to be published online, will cover the physical, psychological and social impact of OA.

PMID:

22458083

[PubMed - indexed for MEDLINE]

13. Health Technol Assess. 2012;16(11):1-264. doi: 10.3310/hta16110.

Management of frozen shoulder: a systematic review and cost-effectiveness analysis.

Maund E, Craig D, Suekarran S, Neilson A, Wright K, Brealey S, Dennis L, Goodchild L, Hanchard N, Rangan A, Richardson G, Robertson J, McDaid C.

Source

Centre for Reviews and Dissemination, University of York, York, UK.

Abstract

BACKGROUND:

Frozen shoulder is condition in which movement of the shoulder becomes restricted. It can be described as either primary (idiopathic) whereby the aetiology is unknown, or secondary, when it can be attributed to another cause. It is commonly a self-limiting condition, of approximately 1 to 3 years' duration, though incomplete resolution can occur.

OBJECTIVES:

To evaluate the clinical effectiveness and cost-effectiveness of treatments for primary frozen shoulder, identify the most appropriate intervention by stage of condition and highlight any gaps in the evidence.

DATA SOURCES:

A systematic review was conducted. Nineteen databases and other sources including the Cumulative Index to Nursing and Allied Health (CINAHL), Science Citation Index, BIOSIS Previews and Database of Abstracts of Reviews of Effects (DARE) were searched up to March 2010 and EMBASE and MEDLINE up to January 2011, without language restrictions. MEDLINE, CINAHL and PsycINFO were searched in June 2010 for studies of patients' views about treatment.

REVIEW METHODS:

Randomised controlled trials (RCTs) evaluating physical therapies, arthrographic distension, steroid injection, sodium hyaluronate injection, manipulation under anaesthesia, capsular release or watchful waiting, alone or in combination were eligible for inclusion. Patients with primary frozen shoulder (with or without diabetes) were included. Quasi-experimental studies were included in the absence of RCTs and case series for manipulation under anaesthesia (MUA) and capsular release only. Full economic evaluations meeting the intervention and population inclusion criteria of the clinical review were included. Two researchers independently screened studies for relevance based on the inclusion criteria. One reviewer extracted data and assessed study quality; this was checked by a second reviewer. The main outcomes of interest were pain, range of movement, function and disability, quality of life and adverse events. The analysis comprised a narrative synthesis and pair-wise meta-analysis. A mixed-treatment comparison (MTC) was also undertaken. An economic decision model was intended, but was found to be implausible because of a lack of available

evidence. Resource use was estimated from clinical advisors and combined with quality-adjusted life-years obtained through mapping to present tentative cost-effectiveness results.
RESULTS:
Thirty-one clinical effectiveness studies and one economic evaluation were included. The clinical effectiveness studies evaluated steroid injection, sodium hyaluronate, supervised neglect, physical therapy (mainly physiotherapy), acupuncture, MUA, distension and capsular release. Many of the studies identified were at high risk of bias. Because of variation in the interventions and comparators few studies could be pooled in a meta-analysis. Based on single RCTs, and for some outcomes only, short-wave diathermy may be more effective than home exercise. High-grade mobilisation may be more effective than low-grade mobilisation in a population in which most patients have already had treatment. Data from two RCTs showed that there may be benefit from adding a single intra-articular steroid injection to home exercise in patients with frozen shoulder of < 6 months' duration. The same two trials showed that there may be benefit from adding physiotherapy (including mobilisation) to a single steroid injection. Based on a network of nine studies the MTC found that steroid combined with physiotherapy was the only treatment showing a statistically and clinically significant beneficial treatment effect compared with placebo for short-term pain (standardised mean difference -1.58, 95% credible interval -2.96 to -0.42). This analysis was based on only a subset of the evidence, which may explain why the findings are only partly supportive of the main analysis. No studies of patients' views about the treatments were identified. Average costs ranged from £36.16 for unguided steroid injections to £2204 for capsular release. The findings of the mapping suggest a positive relationship between outcome and European Quality of Life-5 Dimensions (EQ-5D) score: a decreasing visual analogue scale score (less pain) was accompanied by an increasing (better) EQ-5D score. The one published economic evaluation suggested that low-grade mobilisation may be more cost-effective than high-grade mobilisation. Our tentative cost-effectiveness analysis suggested that steroid alone may be more cost-effective than steroid plus physiotherapy or physiotherapy alone. These results are very uncertain.
LIMITATIONS:
The key limitation was the lack of data available. It was not possible to undertake the planned synthesis exploring the influence of stage of frozen shoulder or the presence of diabetes on treatment effect. As a result of study diversity and poor reporting of outcome data there were few instances where the planned quantitative synthesis was possible or appropriate. Most of the included studies had a small number of participants and may have been underpowered. The lack of available data made the development of a decision-analytic model implausible. We found little evidence on treatment related to stage of condition, treatment pathways, the impact on quality of life, associated resource use and no information on utilities. Without making a number of questionable assumptions modelling was not possible.
CONCLUSIONS:
There was limited clinical evidence on the effectiveness of treatments for primary frozen shoulder. The economic evidence was so limited that no conclusions can be made about the cost-effectiveness of the different treatments. High-quality primary research is required.
PMID:
22405512
[PubMed - indexed for MEDLINE]
Free full text

14. Cochrane Database Syst Rev. 2012 Jan 18;1:CD008496. doi: 10.1002/14651858.CD008496.pub2.

Non-drug therapies for lower limb muscle cramps.

Blyton F, Chuter V, Walter KE, Burns J.

Source

School of Health Sciences, Faculty of Health, The University of Newcastle, Ourimbah, Australia. fiona.blyton@newcastle.edu.au.

Abstract

BACKGROUND:

About one in every three adults are affected by lower limb muscle cramps. For some people, these cramps reduce quality of life, quality of sleep and participation in activities of daily living. Many interventions are available for lower limb cramps, but some are controversial, no treatment guidelines exist, and often people experience no benefit from the interventions prescribed.

OBJECTIVES:

To assess the effects of non-drug, non-invasive treatments for lower limb cramp.

SEARCH METHODS:

We searched the Cochrane Neuromuscular Disease Group Specialized Register (13 September 2011) using the terms: cramp, spasm, contracture, charley horse and lower limb, lower extremity, foot, calf, leg, thigh, gastrocnemius, hamstring, quadriceps. We also searched CENTRAL (2011, Issue 3), MEDLINE (January 1966 to August 2011) and EMBASE (January 1980 to August 2011) and the reference lists of included studies. There were no language or publication restrictions.

SELECTION CRITERIA:

All randomised controlled trials of non-drug, non-invasive interventions trialled over at least four weeks for the prevention of lower limb muscle cramps in any group of people. We excluded, for example, surgery, acupuncture and dry-needling, as invasive interventions. We selected only trials that included at least one of the following outcomes: cramp frequency, cramp severity, health-related quality of life, quality of sleep, participation in activities of daily living and adverse outcomes.

DATA COLLECTION AND ANALYSIS:

Two authors independently selected trials, assessed risk of bias and cross checked data extraction and analysis. A third author was to arbitrate in the event of disagreement. We asked the authors of five trials for information to assist with screening studies for eligibility and received four responses.

MAIN RESULTS:

One trial was eligible for inclusion. All participants were age 60 years or over and had received a repeat prescription from their general practitioner of quinine for nighttime cramps in the preceding three months. This review includes data from only those participants who were advised to continue taking quinine. Forty-nine participants were advised to complete lean-to-wall calf muscle stretching held for 10 s three times per day. Forty-eight participants were allocated to a placebo stretching group. After 12 weeks, there was no statistically significant difference in recalled cramp frequency between groups. No "significant" adverse effect was reported. Limitations in the study's design impede interpretation of the results and clinical applicability.

AUTHORS' CONCLUSIONS:

There is limited evidence on which to base clinical decisions regarding the use of non-drug therapies for the treatment of lower limb muscle cramp. Serious methodological limitations in the existing evidence hinder clinical application. There is an urgent need to carefully evaluate many of the commonly recommended and emerging non-drug therapies in well designed randomised controlled trials.

PMID:

22258986

[PubMed - indexed for MEDLINE]

15. Work. 2012;41(1):5-13. doi: 10.3233/WOR-2012-1235.

Acupuncture in treatment of musculoskeletal disorders of orchestra musicians.

Molsberger F, Molsberger A.

Source

Research Group for Musicians Medicine, Tristanstr, OT Groß Glienicke, Potsdam, Germany. f.molsberger@musikermedizin.info
Abstract
OBJECTIVE:
Playing-related musculoskeletal disorders (PRMD) are common among musicians. Acupuncture is well established in Germany as a treatment for orthopedic conditions, but it is not commonly used in the treatment of PRMD yet. The authors examined the musicians' health literature and provide a brief overview about the background of acupuncture. Three case studies are presented to show possible benefits for the treatment of PRMD. Participants: 2456 medical doctors, members of the German research group for acupuncture.
METHODS:
We searched literature and Medline Database for publications about acupuncture, musicians' medicine and musculoskeletal disorders. Additionally we asked medical doctors, via a questionnaire, about the treatment of professional musicians as patients. Case studies are presented.
RESULTS:
No research was found to support the use oft acupuncture in PRMD. The survey study found that medical doctors are not satisfied with the quality of medical health care provided to musicians and regard specialist knowledge as being important.
CONCLUSION:
Evidence on the benefits of acupuncture for musculoskeletal disorders suggests that it could be of benefit as a complementary treatment of PRMD. We suggest performing clinical trials to demonstrate the value of standard treatment, acupuncture and complementary medicine for PRMD.
PMID:
22246298
[PubMed - indexed for MEDLINE]

16. Curr Pain Headache Rep. 2011 Dec;15(6):431-7. doi: 10.1007/s11916-011-0227-x.

Complementary and alternative medicine for rheumatoid arthritis and osteoarthritis: an overview of systematic reviews.

Ernst E, Posadzki P.
Source
Complementary Medicine, Peninsula Medical School, Universities of Exeter & Plymouth, UK.
Abstract
This review critically evaluates the literature on complementary and alternative medicine (CAM) as treatment options for rheumatoid arthritis and osteoarthritis. Design: Electronic databases were searched to identify all relevant systematic reviews of the effectiveness of CAM in rheumatoid arthritis and osteoarthritis published between January 2010 and January 2011. Reviews were defined as systematic if they included explicit and repeatable inclusion and exclusion criteria for studies. Their methodological quality was assessed using the Oxman criteria for systematic reviews. Results: Five systematic reviews met our inclusion criteria. They all arrived at cautious conclusions. Four reviews were of high quality and one was burdened with high risk of bias. The evidence to support the effectiveness of CAM as a treatment option for rheumatoid arthritis and osteoarthritis is ambiguous.
PMID:
21979101
[PubMed - indexed for MEDLINE]

17. Altern Med Rev. 2011 Sep;16(3):228-38.

The use of glucosamine, devil's claw (Harpagophytum procumbens), and acupuncture as complementary and alternative treatments for osteoarthritis.

Sanders M, Grundmann O.

Source
Department of Medicinal Chemistry, University of Florida, FL, USA. .
Abstract
Osteoarthritis is one of the most common chronic inflammatory conditions seen in the general population. Current pharmacological treatments focus on reduction of pain and increased mobility to improve overall quality of life. However, the relief afforded by current standard care is often insufficient and can be associated with significant side effects. Many patients, therefore, seek the option of non-standard therapies, such as nutritional and herbal supplements, acupuncture, and exercise regimens. Glucosamine, Harpagophytum procumbens, and acupuncture are among the most commonly used complementary and alternative medicine approaches utilized by patients suffering from osteoarthritis. Their clinical relevance, safety, and potential mechanisms of action are discussed in this review.
PMID:
21951024
[PubMed - indexed for MEDLINE]
Free full text

18. Acupunct Electrother Res. 2011;36(1-2):1-18.

Effective acupuncture practice through diagnosis based on distribution of meridian pathways & related syndromes.

Chen Y, Zheng X, Li H, Zhang Q, Wang T.
Source
New York College of Traditional Chinese Medicine, Mineola, NY, USA. cheyemeng@gmail.com
Abstract
This article discusses the importance of acupuncture practice utilizing diagnosis and distribution of various meridians and connecting channels based on meridian theory. The meridian system is considered as basic anatomy for acupuncture, so the corresponding pathways and related syndromes of different channels should play a key role in differentiation, known as meridian-related pattern differentiation. Since this doctrine originated in ancient times and was not so well developed in later generations, many acupuncturists are not able to utilize it efficiently. The authors survey how this doctrine was weakened during the past century, especially in acupuncture education for foreigners, and how this important method is currently being reinvigorated. This article also lays out the ways this doctrine can be applied clinically and introduces examples of a variety of indications including some difficult cases, such as whiplash injury, intervertebral disc herniation, oculomotor nerve paralysis, and eczema, etc.
PMID:
21830349
[PubMed - indexed for MEDLINE]

19. Clin Rheumatol. 2012 Jan;31(1):55-66. doi: 10.1007/s10067-011-1783-5. Epub 2011 May 26.

An overview of systematic reviews of complementary and alternative medicine for fibromyalgia.

Terry R, Perry R, Ernst E.
Source
Complementary Medicine, Peninsula Medical School, University of Exeter, Exeter, UK. rohini.terry@pms.ac.uk
Abstract
Fibromyalgia (FM) is a chronic pain condition which is difficult to diagnose and to treat. Most individuals suffering from FM use a variety of complementary or alternative medicine (CAM) interventions to treat and manage their symptoms. The aim of this overview was to critically

evaluate all systematic reviews of single CAM interventions for the treatment of FM. Five systematic reviews met the inclusion criteria, evaluating the effectiveness of homoeopathy, chiropractic, acupuncture, hydrotherapy and massage. The reviews found some evidence of beneficial effects arising from acupuncture, homoeopathy, hydrotherapy and massage, whilst no evidence for therapeutic effects from chiropractic interventions for the treatment of FM symptoms was found. The implications of these findings and future directions for the application of CAM in chronic pain conditions, as well as for CAM research, are discussed.
PMID:
21614472
[PubMed - indexed for MEDLINE]

20. Clin Rheumatol. 2011 Jul;30(7):937-45. doi: 10.1007/s10067-011-1706-5. Epub 2011 Feb 18.

Moxibustion for rheumatic conditions: a systematic review and meta-analysis.

Choi TY, Kim TH, Kang JW, Lee MS, Ernst E.

Source

Korea Institute of Oriental Medicine, Daejeon 305-811, South Korea.

Abstract

Moxibustion, an acupuncture-like intervention, is increasingly used in the management of rheumatic conditions. The aim of this review is to summarize and critically evaluate the trials testing effectiveness of moxibustion for major rheumatic conditions. Fourteen databases were searched from their inception through May 2010, without language restriction. Randomized clinical trials (RCTs) were included if moxibustion was used as the sole treatment or as a part of a combination therapy with conventional drugs for rheumatic conditions. Cochrane criteria were used to assess the risk of bias. A total of 14 RCTs met our inclusion criteria. All were of low methodological quality. The meta-analysis of the eight RCTs suggested favorable effects of moxibustion on the response rate compared with conventional drug therapy [n = 631; relative risk (RR), 1.13; 95% confidence intervals (CIs), 1.02 to 1.26; P = 0.02] with high heterogeneity (I (2) = 58%). A subgroup analysis showed significant effects of moxibustion on the RR compared with drug therapy in patients with knee osteoarthritis, whereas it failed to do so in rheumatoid arthritis. The results of meta-analysis of the six RCTs suggested favorable effects of moxibustion plus drug therapy on the response rate compared with conventional drug therapy alone (n = 433; RR, 1.25; 95% CIs, 1.09 to 1.43; P = 0.02) with high heterogeneity (I (2) = 62%). This systematic review fails to provide conclusive evidence for the effectiveness of moxibustion compared with drug therapy in rheumatic conditions. The total number of RCTs included in this review and their methodological quality were low. These limitations make it difficult to draw firm conclusions.
PMID:
21331532
[PubMed - indexed for MEDLINE]

21. Rheum Dis Clin North Am. 2011 Feb;37(1):9-17. doi: 10.1016/j.rdc.2010.11.009. Epub 2010 Dec 3.

Effectiveness of CAM therapy: understanding the evidence.

Staud R.

Source

Department of Medicine, University of Florida College of Medicine, Gainesville, FL 32610-0221, USA. staudr@ufl.edu

By definition, complementary and alternative medicine (CAM) attempts to diagnose and treat illnesses in unconventional ways. CAM has been classified as: (1) alternative medical systems (eg, traditional Chinese medicine [including acupuncture], naturopathic medicine, ayurvedic medicine,

and homeopathy); (2) biologic-based therapies (eg, herbal, special dietary, and individual biologic treatments); (3) energy therapies (eg, Reiki, therapeutic touch, magnet therapy, Qi Gong, and intercessory prayer); (4) manipulative and body-based systems (eg, chiropractic, osteopathy, and massage); and (5) mind-body interventions (eg, meditation, biofeedback, hypnotherapy, and the relaxation response). This review focuses on how to assess the effectiveness of CAM therapies for chronic musculoskeletal pains, emphasizing the role of specific and nonspecific analgesic mechanisms, including placebo.

PMID:
21220082
[PubMed - indexed for MEDLINE]

22. Rheumatology (Oxford). 2010 Oct;49(10):1957-61. doi: 10.1093/rheumatology/keq180. Epub 2010 Jun 29.

Acupuncture for rheumatic conditions: an overview of systematic reviews.

Ernst E, Lee MS.
Source
Complementary Medicine, Peninsula Medical School, Universities of Exeter and Plymouth, Exeter EX2 4NT, UK. edzard.ernst@pms.ac.uk

Abstract
OBJECTIVE:
Several systematic reviews (SRs) have assessed the effectiveness of acupuncture for rheumatic conditions, often with contradictory conclusions. Our aim is to provide a critical evaluation and summary of these data.
METHODS:
Electronic searches were conducted in 15 databases to locate all SRs on acupuncture for rheumatic conditions published since 2000. Data were extracted by the authors according to pre-defined criteria.
RESULTS:
We found 30 SRs that met our inclusion criteria. They related to the following rheumatic conditions: FM, low back pain, lateral elbow pain, musculoskeletal pain, orthopaedic diseases, OA, RA, shoulder pain, frozen shoulder, neck disorder, AS and sciatica. Their conclusions were in several instances contradictory. Relatively clear evidence emerged to suggest that acupuncture is effective for OA, low back pain and lateral elbow pain and ineffective for FM and RA.
CONCLUSION:
Many SRs have recently been done. Only for OA, low back pain and lateral elbow pain is the evidence sufficiently sound to warrant positive recommendations of this therapy in routine care of rheumatic patients.
PMID:
20591833
[PubMed - indexed for MEDLINE]
Free full text

23. J Altern Complement Med. 2010 Apr;16(4):397-409. doi: 10.1089/acm.2009.0599.

Traditional Chinese Medicine for treatment of fibromyalgia: a systematic review of randomized controlled trials.

Cao H, Liu J, Lewith GT.
Source
Centre for Evidence-Based Chinese Medicine, Beijing University of Chinese Medicine, Beijing, China.

BACKGROUND:

Traditional Chinese Medicine (TCM) is popular for treatment of fibromyalgia (FM) although there is a lack of comprehensive evaluation of current clinical evidence for TCM's therapeutic effect and safety. Objective: To review systematically the beneficial and harmful effects of TCM therapies for FM.

METHODS:

We searched six English and Chinese electronic databases for randomized clinical trials (RCTs) on TCM for treatment of FM. Two authors extracted data and assessed the trial quality independently. RevMan 5 software was used for data analyses with an effect estimate presented as mean difference (MD) with a 95% confidence interval (CI).

RESULTS:

Twenty-five RCTs were identified with 1516 participants for this review. Seven trials (28%) were evaluated as having a low risk of bias and the remaining trials were identified as being as unclear or having a high risk of bias. Overall, ten trials were eligible for the meta-analysis, and data from remaining 15 trials were synthesized qualitatively. Acupuncture reduced the number of tender points (MD, -3.21; 95% CI -4.23 to -2.11; $p < 0.00001$, $I(2) = 0\%$), and pain scores compared with conventional medications (MD, -1.78; 95% CI, -2.24 to -1.32; $p < 0.00001$; $I(2) = 0\%$). Acupuncture showed no significant effect, with a random-effect model, compared with sham acupuncture (MD, -0.55; 95% CI, -1.35-0.24; $p = 0.17$; $I(2) = 69\%$), on pain reduction. A combination of acupuncture and cupping therapy was better than conventional medications for reducing pain (MD, -1.66; 95% CI, -2.14 to -1.19; $p < 0.00001$; $I(2) = 0\%$), and for improving depression scores with related to FM (MD, -4.92; 95% CI, -6.49 to -3.34; $p < 0.00001$; $I(2) = 32\%$). Other individual trials demonstrated positive effects of Chinese herbal medicine on pain reduction compared with conventional medications. There were no serious adverse effects reported that were related to TCM therapies in these trials.

CONCLUSIONS:

TCM therapies appear to be effective for treating FM. However, further large, rigorously designed trials are warranted because of insufficient methodological rigor in the included trials.

PMID:
20423209
[PubMed - indexed for MEDLINE]
PMCID:
PMC3110829
Free PMC Article

24. Rheumatol Int. 2010 Apr;30(6):713-8. doi: 10.1007/s00296-010-1370-0. Epub 2010 Mar 5.

Traditional Chinese medicine in the treatment of rheumatoid arthritis: a general review.

Zhang P, Li J, Han Y, Yu XW, Qin L.

Source

The Translational Medicine R&D Center, Shen Zhen Institute of Advanced Technology, Chinese Academy of Science, Shen Zhen, GuangDong Province, China. superzhangpeng@sina.com

Abstract

Rheumatoid arthritis (RA) is difficult to cure. Many methods have been used for its treatment, among which traditional Chinese medicine (TCM) has been considered as an important strategy. All of the three parts of TCM: Chinese herbs, acupuncture, and massage have been reported with varying degrees of therapeutic effects on RA. Also the mechanism exploration is under process. Many effective ingredients of anti-rheumatic Chinese herbs have been found to inhibit RA development and some of the effective ingredients have been verified. Furthermore, greatly enhanced life quality of RA patients was obtained using acupuncture and massage to relieve pain, expand joint motion and modulate emotion which mainly correlated with the possible modulation of immune system, nerve system, endocrine system, etc. Thus, a systemic review on the therapeutic effect of TCM on RA is necessary. In our paper, the current status of TCM application in the clinic

for the therapy of RA was summarized accompanied with the related mechanism exploration using modern test facilities.
PMID:
20204371
[PubMed - indexed for MEDLINE]

25. Cochrane Database Syst Rev. 2010 Jan 20;(1):CD001977. doi: 10.1002/14651858.CD001977.pub2.

Acupuncture for peripheral joint osteoarthritis.

Manheimer E, Cheng K, Linde K, Lao L, Yoo J, Wieland S, van der Windt DA, Berman BM, Bouter LM.
Source
Center for Integrative Medicine, University of Maryland School of Medicine, Kernan Hospital Mansion, 2200 Kernan Drive, Baltimore, Maryland, USA, 21207-6697.
emanheimer@compmed.umm.edu

Abstract
BACKGROUND:
Peripheral joint osteoarthritis is a major cause of pain and functional limitation. Few treatments are safe and effective.
OBJECTIVES:
To assess the effects of acupuncture for treating peripheral joint osteoarthritis.
SEARCH STRATEGY:
We searched the Cochrane Central Register of Controlled Trials (The Cochrane Library 2008, Issue 1), MEDLINE, and EMBASE (both through December 2007), and scanned reference lists of articles.
SELECTION CRITERIA:
Randomized controlled trials (RCTs) comparing needle acupuncture with a sham, another active treatment, or a waiting list control group in people with osteoarthritis of the knee, hip, or hand.
DATA COLLECTION AND ANALYSIS:
Two authors independently assessed trial quality and extracted data. We contacted study authors for additional information. We calculated standardized mean differences using the differences in improvements between groups.
MAIN RESULTS:
Sixteen trials involving 3498 people were included. Twelve of the RCTs included only people with OA of the knee, 3 only OA of the hip, and 1 a mix of people with OA of the hip and/or knee. In comparison with a sham control, acupuncture showed statistically significant, short-term improvements in osteoarthritis pain (standardized mean difference -0.28, 95% confidence interval -0.45 to -0.11; 0.9 point greater improvement than sham on 20 point scale; absolute percent change 4.59%; relative percent change 10.32%; 9 trials; 1835 participants) and function (-0.28, -0.46 to -0.09; 2.7 point greater improvement on 68 point scale; absolute percent change 3.97%; relative percent change 8.63%); however, these pooled short-term benefits did not meet our predefined thresholds for clinical relevance (i.e. 1.3 points for pain; 3.57 points for function) and there was substantial statistical heterogeneity. Additionally, restriction to sham-controlled trials using shams judged most likely to adequately blind participants to treatment assignment (which were also the same shams judged most likely to have physiological activity), reduced heterogeneity and resulted in pooled short-term benefits of acupuncture that were smaller and non-significant. In comparison with sham acupuncture at the six-month follow-up, acupuncture showed borderline statistically significant, clinically irrelevant improvements in osteoarthritis pain (-0.10, -0.21 to 0.01; 0.4 point greater improvement than sham on 20 point scale; absolute percent change 1.81%; relative percent change 4.06%; 4 trials;1399 participants) and function (-0.11, -0.22 to 0.00; 1.2 point greater improvement than sham on 68 point scale; absolute percent change 1.79%; relative percent change

3.89%). In a secondary analysis versus a waiting list control, acupuncture was associated with statistically significant, clinically relevant short-term improvements in osteoarthritis pain (-0.96, -1.19 to -0.72; 14.5 point greater improvement than sham on 100 point scale; absolute percent change 14.5%; relative percent change 29.14%; 4 trials; 884 participants) and function (-0.89, -1.18 to -0.60; 13.0 point greater improvement than sham on 100 point scale; absolute percent change 13.0%; relative percent change 25.21%). In the head-on comparisons of acupuncture with the 'supervised osteoarthritis education' and the 'physician consultation' control groups, acupuncture was associated with clinically relevant short- and long-term improvements in pain and function. In the head on comparisons of acupuncture with 'home exercises/advice leaflet' and 'supervised exercise', acupuncture was associated with similar treatment effects as the controls. Acupuncture as an adjuvant to an exercise based physiotherapy program did not result in any greater improvements than the exercise program alone. Information on safety was reported in only 8 trials and even in these trials there was limited reporting and heterogeneous methods.

AUTHORS' CONCLUSIONS:

Sham-controlled trials show statistically significant benefits; however, these benefits are small, do not meet our pre-defined thresholds for clinical relevance, and are probably due at least partially to placebo effects from incomplete blinding. Waiting list-controlled trials of acupuncture for peripheral joint osteoarthritis suggest statistically significant and clinically relevant benefits, much of which may be due to expectation or placebo effects.