

Specific question: Does acupuncture improve pain, function and quality of life for adults with fibromyalgia?

Clinical bottom line

There is low to moderate level evidence that western and electro acupuncture improves pain, sleep and global well-being in people with fibromyalgia when compared with no treatment and standard therapy.

The effects last up to one month, but is not maintained at six months follow-up.

The small study sample sizes and lack of ideal sham acupuncture weaken the level of evidence and its clinical implications. Larger studies are warranted.

Western or electro acupuncture could be considered as a treatment for patients with fibromyalgia.

Why is this important?

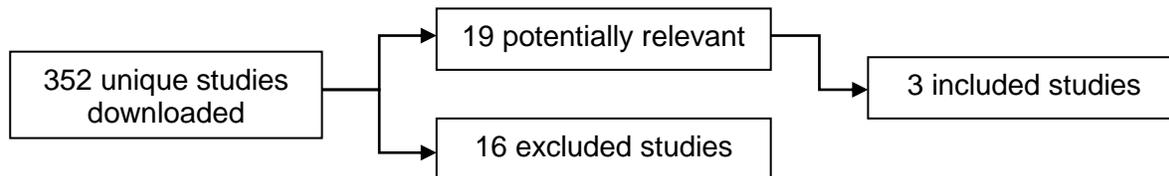
Adults with fibromyalgia are often referred frequently for acupuncture treatment within our physiotherapy services. If improvement in pain, function and quality of life are achieved they seem to be short term. It was therefore necessary to establish the evidence base which underpins acupuncture treatment for fibromyalgia.

Inclusion Criteria

	Description	Search terms
Population and Setting	Adults with a clinical diagnosis of fibromyalgia.	Fibromyalgia
Intervention or Exposure (i.e. what is being tested)	Western acupuncture, electro acupuncture.	Acupuncture
Comparison, if any	Graded exercise programme, Usual Physiotherapy Care	
Outcomes of interest	Pain, function, Quality of life.	
Types of studies	SR & RCTs only Observational studies if no RCTs	

Database	Date/Issue searched	Searched from	Number of records downloaded
Cochrane Systematic Reviews	17/7/14	No date limit applied	6
Clinical Evidence	Not available		
DARE/HTA/NHSEED	17/7/14		DARE 8; HTA 2
Medline (HDAS)	17/7/14		5
CINAHL (HDAS)	17/7/14		101
AMED (HDAS)	17/7/14		60
PsycInfo	Not relevant		
Cochrane (CENTRAL)	17/7/14		47
Web of Science	Not available		
IBSS (BIDS)	Not available		
Other databases:			
EMBASE (HDAS)	17/7/14		81
NHS Evidence	17/7/14		
PEDro	18/07/14		42

Results



First Author, year and type of study	Population and setting	Intervention or exposure tested	Study results	Assessment of quality and comments
<p>Deare et al 2013 (Cochrane Database) (Acupuncture for treating fibromyalgia)</p>	<p>395 Adults with Fibromyalgia were included. Nine Studies included.</p>	<p>Types of intervention were restricted to acupuncture that breaks the skin for therapeutic benefit. Studies comparing different styles of acupuncture were also included.</p>	<p>Moderate quality evidence from six studies (286 participants) indicated that acupuncture (electro acupuncture or manual acupuncture) was no better than sham acupuncture, except for less stiffness at one month. Moderate quality evidence from one study (58 participants) found that compared with standard therapy alone (antidepressants and exercise), adjunct acupuncture therapy reduced pain at one month after treatment</p>	<p>Search methods had no language restrictions but there no mention of grey matter. Two author pairs selected trials, extracted data and assessed bias risk. 9 trials were included. Treatment effects were assessed using various measurement tools. Data was pooled using the random-effects model. Low to moderate level evidence that electro or manual acupuncture improves pain/stiffness up to one month but is not maintained at 6 months.</p>
<p>Langhorst et al 2010 (Systematic review and meta-analysis) (Efficacy of acupuncture in Fibromyalgia syndrome – a systematic review with meta-analysis of controlled clinical Trials)</p>	<p>385 Adults with Fibromyalgia were included. Seven studies included.</p>	<p>Three types of acupuncture were defined, Chinese acupuncture, Western acupuncture, and Japanese acupuncture</p>	<p>A small analgesic effect of acupuncture was present, which however was not distinguishable from bias.</p>	<p>Reasonable review, no mention of grey literature, 3 reviewers, used a quality score, 7 trials, 5 of which were rated as medium to high, seemed to be beneficial for pain but not pain and fatigue. It suggests that the heterogeneity was high for sleep and fatigue, so they may have been too similar to compare. Good conclusions and different type of acupuncture included.</p>

<p>Casanueva et al 2014 (RCT) ((Short-term improvement following dry needle stimulation of tender points in Fibromyalgia).</p>	<p>120 Adults with fibromyalgia</p>	<p>Two groups: Dry needling or usual treatment (control group)</p>	<p>Patients severely affected by fibromyalgia can obtain short-term improvements in pain following weekly dry needling for 6 weeks.</p>	<p>- Good description of those included, had failed many previous treatments. Described inclusion and exclusion criteria. Randomised by computer, 60 in each group but lost 10 in each group. Described dry needling well. VAS main outcome but didn't state what time point was 6 or 12. Didn't include a power calculation. Short term follow-up 6 or 12 weeks. Not sure when primary outcome measured. They could maintain their current medication but not sure what that looks like. Some differences at baseline.</p>
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Conclusions

There is moderate-level evidence that the effect of western and electro-acupuncture does not differ from sham acupuncture in reducing pain or fatigue, or improving sleep or global well-being.

There is low to moderate level evidence that acupuncture improves pain, sleep and global well-being in people with Fibromyalgia when compared with no treatment and standard therapy in the short term.

Electro-acupuncture is probably better than manual acupuncture for pain and stiffness reduction and improvement of global well-being, sleep and fatigue. The effect lasts up to one month, but is not maintained at six months follow-up. People with fibromyalgia may consider using Electro-acupuncture alone or with exercise and medication. However Electro-acupuncture is not currently offered within local Trusts.

The small sample size within studies, scarcity of studies for each comparison, lack of ideal sham acupuncture weakens the level of evidence and its clinical implications.

Larger studies are warranted.

References

Casanueva B, Rivas P, Rodero B, Quintal C, Llorca J, Miguel A, Gay G (2014) Short-term improvement following dry needle stimulation of tender points in fibromyalgia: *Rheumatology International* 34: 861-866

Langhorst J, Klohe P, Musial F, Irnich D, Hauser W (2010) Efficacy of acupuncture in Fibromyalgia syndrome – a systematic review with a meta-analysis of controlled clinical trial: *Rheumatology* 49: 778-788

Deare JC, Zheng Z, Xue CCL, Liu JP, Shang J, Scott SW, Littlejohn G (2013) Acupuncture for treating Fibromyalgia (review): *The Cochrane Collaboration*