**Acupuncture for chronic primary pain – are UK guidelines now consistent with other countries?**

Short running title Acupuncture for chronic primary pain, UK guidelines

Stephen Birch1, Mark Bovey2, Nicola Robinson3,4

1 Kristiania University College, School of Health Sciences, Oslo, Norway

2 British Acupuncture Council, London UK

3 School of Health and Social Care, London South Bank University, UK

4 Centre for Evidence-based Chinese Medicine, Beijing University of Chinese Medicine

Prof Nicola Robinson ORCHID 0000-0001-5256-4527

Dr Stephen Birch ORCHID 0000-0001-7986-6568

Mark Bovey ORCHID 0000-0002-0113-3441

Corresponding author

Stephen Birch

Kristiania University College,

School of Health Sciences, Kirkegata 24-26,

0153 Oslo,

Norway

E mail sjbirch@gmail.com

All e mails     sjbirch@gmail.com;‎  m.bovey@acupuncture.org.uk;  nicky.robinson@lsbu.ac.uk

Abstract

Introduction

Chronic pain was reclassified by the World Health Organisation in 2019 into primary and secondary chronic pain. Clinical guidelines on chronic primary pain recently issued in the UK for consultation by the National Institute of Health and Care Excellence (NICE) have included acupuncture as a primary treatment. The aim of this article was to explore the evidence in support of this recommendation and gauge whether NICE is in line with international guidelines.

Methods

UK clinical guideline recommendations on the use of acupuncture for chronic pain were compared with selected key national and international guidelines to identify whether acupuncture is included and whether it is recommended.

Results

By recommending acupuncture as a potential treatment for chronic primary pain, NICE is now in line with clinical guideline recommendations from within the UK nations (Scotland, Wales) and other countries such as the USA, Australia, Canada, New Zealand, Germany, Austria as well as organizations such as the British Pain Society and the European Pain Federation

Conclusions

The problems of drug dependency especially overuse of opioids and their associated unwanted side effects suggest that non-pharmacological methods that can deal with chronic pain are imperative. Acupuncture provides a bone fide choice particularly as its evidence of effectiveness continues to grow.

**Keywords: Acupuncture; Clinical guidelines; Pain; National Institute of Health and Care Excellence (NICE)**

**Introduction**

In the World Health Organization’s (WHO) 2019 update of the International Classification of Diseases (ICD-11), chronic pain was classified as either chronic primary pain or chronic secondary pain [1,2]. The new definition for chronic pain is; pain, persisting for longer than 3 months, causing significant emotional distress and/or disability and therefore recognised as a health condition in its own right. It includes for example conditions such as, fibromyalgia, chronic migraine, irritable bowel syndrome and non-specific back pain. Chronic secondary pain syndromes relate to pain which is a symptom of another underlying cause, such as sequelae of cancer treatments or surgery.

**The new UK chronic pain guideline**

The UK’s National Institute of Health and Care Excellence **(**NICE) released the draft of new guidelines for the treatment of chronic pain and chronic primary pain for comment on August 3, 2020 [3]. This is written for health professionals, health commissioners and service providers and people with chronic pain. It refers to previous NICE guidelines for a number of chronic pain conditions and then details treatment recommendations for chronic primary pain.

The guideline group evaluated evidence of effectiveness and safety across a wide range of interventions. Problems of drug dependency (e.g. opioids) and other unwanted side effects of medications have become more important in recent years [4]. Increasingly pain experts are recommending non-pharmacological treatments ahead of pharmacological treatments and positioning opioids lower down the list of treatment options for chronic pain [5-7]. In this new guidance NICE also recommends a number of non-pharmacological interventions as primary therapies in preference to pharmacological interventions, with the exception of anti-depressants.

The therapies that are to be offered as possible treatments are those with best evidence in terms of effectiveness and safety and were defined as follows:

* Primary treatments are: exercise, psychological therapy, acupuncture and anti-depressants
* Treatments for which evidence exists but that require further research before concrete recommendations can be made are: pain management programs, social interventions and manual therapy
* Therapies that have poor evidence and should not be used are: electrical physical modalities - TENS, ultrasound, interferential therapy
* With the exception of anti-depressants, the group recommended against use of other drugs, saying: “Do not offer any of the following, by any route, to people aged 16 years and over to manage chronic primary pain”: Opioids, NSAIDs, benzodiazepines, anti-epileptics, local anaesthetics, local anaesthetic/corticosteroid combinations, paracetamol, ketamine, corticosteroids, antipsychotics.

Therefore the guideline has suggested that only anti-depressants, exercise, psychological therapy and acupuncture should be the treatments offered for chronic primary pain, which represents a radical departure for NICE from previous recommendations.

The usual management of chronic pain has involved use of pain management programs, psychosocial interventions, pharmacological interventions and various non-pharmacological interventions. Problems with opioids are well known [8] due to the ‘opioid crisis’ [7]. Not only are opioids not effective for chronic pain [9], but addiction and other side effects are very significant [9-11]. Groups around the world have been seeking different approaches to pain management that do not use or minimise use of opioids [5-7,12].Thus recent approaches have looked across different interventions with the same eyes in order to identify more appropriate treatment approaches for chronic pain. With the exception of anti-depressants, the NICE review group found very limited or no evidence of effectiveness for treatment of chronic pain by other pharmacological interventions.

In 2016, this journal highlighted the removal of acupuncture from the previous 2009 NICE guidelines on the management and treatment of low back pain and sciatica [13]. Lai pointed out that the benefits of acupuncture in reducing pain compared to usual care were found to be above the threshold for clinical relevance [14]. We focus on the recommendations regarding acupuncture since they are clearly at odds with other recent NICE guidance on the use of acupuncture for various conditions [15-17], though headache is an exception [18].

**Acupuncture is recommended for chronic pain in other UK guidelines**

Many healthcare providers in the UK are unaware that NICE has recommended acupuncture for chronic pain since 2008 [19]. Spinal cord stimulation guidelines were first published by NICE in 2008, were reapproved in 2014 [15] and are still current [https://www.nice.org.uk/guidance/ta159]. Since spinal cord stimulation is a therapy that has potential for causing harm, the guidelines recommend use of other interventions first, including acupuncture [19]. Perhaps this is one of the reasons why in their central online publications about acupuncture the National Health Service (NHS), since at least 2016, has stated acupuncture can be used for chronic pain [16]. The prioritisation of the use of acupuncture for chronic pain by NICE in this new guideline brings it up to date with recommendations from other UK regions and expert groups. Acupuncture has been recommended for treatment of chronic pain by Scotland’s equivalent organization to NICE, the Scottish Intercollegiate Network (SIGN), first in 2013 [20], reaffirmed in 2018 [21] and again in 2019 [22], in particular for chronic low back pain and osteoarthritis of the knee. The All Wales Medicine Strategy Group likewise recommends acupuncture for chronic pain [23] as has the British Pain Society since at least 2010 [24].

**Acupuncture is recommended for chronic pain in international guidelines**

The new NICE guidelines also parallel increasing numbers of publications from governments and expert groups in other countries. The American Chronic Pain Association has recommended acupuncture since at least 2014 [25]. Among many Government and National Agencies in the US, the Joint Commission [26] and the US Department of Health and Human Services [27] recommend acupuncture for chronic pain. The Australian Government recommends acupuncture for chronic pain [28] as does the Royal New Zealand College of General Practitioners [29] and the Australian national guideline group ‘Therapeutic Guidelines’ [eTG 2012] and the Government of South Australia [8] . The Government of Canada [Government of Canada 2019] and the Canadian group ‘Çhoosing Wisely Canada’ in 2020 <https://choosingwiselycanada.org/patient-pamphlet-opioids/> likewise recommend acupuncture for chronic pain. The European Pain Federation prepared a report on behalf of the European Parliament recommending acupuncture as a treatment option for chronic pain in 2010 [31]. The German Federal Joint Committee recommends acupuncture for chronic pain [33] as does the Austrian Ludwig Boltzmann Institute for Health Technology Assessment [34].

**Discussion**

**A ‘sea change’ for NICE? Comparison with the guidance on low back pain and osteoarthritis**

NICE’s recent stance against acupuncture for knee osteoarthritis [NICE 2014] and low back pain [NICE 2016] revealed a possibly worrying trend, that the guideline group leadership was potentially biased in their analyses and approach to acupuncture [35-37]. For example at almost exactly the same time NICE completed its analysis and published the 2016 guidelines on low back pain, the US Agency for Health Care Research and Quality and the American College of Physicians, analysing the same data drew entirely opposite conclusions about the effectiveness of acupuncture for chronic low back pain [38] leading to recommendations for use of acupuncture in 2017 as one of the first line interventions [39] . SIGN’s recommendations to use acupuncture for low back pain and knee osteoarthritis in 2013 and again 2018 also runs contrary to NICE’s approach for these conditions. Perhaps there has been a change of leadership at NICE or perhaps a different guideline group has been willing to apply an unbiased contextualised analysis of all the data for acupuncture, but whatever the reason, it is a breath of fresh air for the acupuncture field and for patients suffering from chronic pain in the UK. The NHS has been recommending acupuncture regularly for chronic pain since at least 2016 [16], but the lack of NICE recognition of acupuncture has led to reduced NHS acupuncture services. This new NICE guideline should open the way for better and more equitable NHS coverage for acupuncture in the treatment of chronic pain. The fact that acupuncture shows evidence of cost-effectiveness for chronic pain should also inform the process of funding for this NICE recommendation [40-46].

In recent guidelines NICE has emphasised acupuncture-sham comparison results above all else, leading to recommending against acupuncture for low back pain and osteoarthritis [35-37]. However, acupuncture for chronic pain out-performs sham with a difference large enough to be deemed clinically significant (1.0 on a 0-10 VAS). This begs the question whether NICE would have still recommended acupuncture for chronic pain if it had not achieved the required superiority over sham – despite being clinically better than usual care and also cost effective (as was the case for LBP and osteoarthritis), it may also be the start of a recognition of the significant problems of sham acupuncture as a control intervention [47-50]. This would bring acupuncture more into line with non-pharmacological interventions like exercise, manual and psychological therapies, where sham controls have no credibility.

**Chronic pain associated with comorbidity**

Chronic primary pain, like chronic pain syndrome, is a complex condition characterised by not only chronic pain, but also with significant other problems. It includes pain in one or more anatomical regions that “(1) persists or recurs for longer than 3 months, (2) is associated with significant emotional distress (e.g., anxiety, anger, frustration, or depressed mood) and/or significant functional disability (interference in activities of daily life and participation in social roles), and (3) and the symptoms are not better accounted for by another diagnosis.” [1]. Chronic pain syndrome is defined as pain that has persisted for at least three months with affective problems, sleep problems, fatigue, common problems with misuse of prescribed and non-prescribed drugs [51] and can be found classified as a psychiatric condition [52] . Since acupuncture has not only shown weak to moderate evidence of effectiveness in general [53-55], and specifically for chronic pain [55-59] there is evidence for its long term treatment effects [60]. It also some promising evidence for affective problems like depression [61,62,63] including chronic pain with depression [64, 65], anxiety [66,67], addiction problems [68,69], sleep problems [70], and fatigue [71], therefore acupuncture can potentially help the chronic primary pain/chronic pain syndrome patient with more than just the pain [72].

**Limitations**

This review which explored recommendations in clinical guidelines focused on the use of acupuncture for treating chronic pain as a general entity. It did not consider acupuncture treatment for specific pain in different locations, for which in many cases there is limited [73] clinical evidence or even if there is evidence it is largely ignored or omitted [74]. In addition, not all current international clinical guidelines documentation was covered as the aim of the paper was to highlight differences in the interpretation of evidence between different selected national and international organisations and stakeholders and compare and contrast these with the UK NICE guideline experience. A more comprehensive systematic evaluation is required as well as the use of evidence to underpin these guidelines and this will require an international collaborative effort.

**Putting the guidance into practice**

Despite the emphasis worldwide on the production of clinical guidelines, recommendations may not influence clinical practice with many doctors being unaware of guidance [75], thus more efforts are needed to promote these guidelines for clinical practice. Additionally, it will be important to provide further education for acupuncture professionals so that they can work smoothly with mainstream health care professionals that wish to refer their chronic pain patients. Given the rather limited provision of NHS acupuncture services after NICE’s original 2009 recommendation on acupuncture for low back pain (13, 14), the substantial decommissioning of acupuncture across the board in primary care in recent years, and the ever more perilous state of NHS finances, it remains to be seen whether this guideline will lead to widely available acupuncture for the UK public. Nevertheless, it will add significantly to its credibility within medicine, with knock-on effects throughout private practice (where most acupuncture is delivered in the UK) and into other countries.

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