



Correspondence

Acupuncture on aromatase inhibitor-induced arthralgia in patients with breast cancer



To the Editor

Dr Lawrence Chen and colleagues [1] conducted a meta-analysis which concluded that “acupuncture is a safe and viable non-drug treatment that may relieve joint pain in patients with aromatase inhibitor-induced arthralgia (AIA)”. However, there are a few issues that require comment.

First, acupuncture therapy originated in China about 2000 years ago. One of the most important applications of acupuncture is for pain relief [2]. Acupuncture is widely used in China for various types of cancer pain [3]. However, this meta-analysis did not search the Chinese databases (such as CNKI, VIP, Wangfang and CBM), resulting in missed literature reviews. Furthermore, the search strategy is also not mentioned “Zhenjiu”, “Zhenci” and so on in Chinese.

Another question involves the success of the blinding method that mentioned in the included studies was questionable. The acupuncture group was often given verbal cues, such as asking the patients whether they had the feeling of soreness, distension or numbness, but the sham acupuncture group might not have those feelings [4]. Therefore, we suggest that the methods should not be described as double blinded.

In addition, this study focused on patient-reported outcomes, such as BPI, rather than objective indicators and end-point outcomes.

Author disclosure statement

The authors have no conflicts of interest or financial ties to disclose.

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References

- [1] Chen L, Lin CC, Huang TW, Kuan YC, Huang YH, Chen HC, et al. Effect of acupuncture on aromatase inhibitor-induced arthralgia in patients with breast cancer: a meta-analysis of randomized controlled trials. *Breast* 2017;33:132–8.
- [2] White A, Ernst E. A brief history of acupuncture. *Rheumatology* 2004;43:662–3 (Oxford).
- [3] Chiu HY, Hsieh YJ, Tsai PS. Systematic review and meta-analysis of acupuncture to reduce cancer-related pain. *Eur J Cancer Care* 2017;26:17.
- [4] Wechsler ME, Kelley JM, Boyd IO, Dutille S, Marigowda G, Kirsch I, et al. Active albuterol or placebo, sham acupuncture, or no intervention in asthma. *N Engl J Med* 2011;365:119–26.

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Reply to correspondence concerning “Acupuncture on aromatase inhibitor-induced arthralgia in patients with breast cancer”



We greatly appreciate the letter by Zhang et al. [1] commenting on our recently published manuscript regarding the effect of acupuncture on aromatase inhibitor-induced arthralgia (AIA) in breast cancer [2].

According to Zhang et al., the Chinese databases such as China National Knowledge Infrastructure (CNKI), Chinese Science and

Technology Journal Database (VIP), Wang Fang Data Knowledge Service Platform and Chinese Biomedical Literature Database (CBM) should be searched for the issue of acupuncture. Besides, the keywords “Zhenjiu”, “Zhenci” may consider to add in the search strategy. We agree with the suggestion. However, some Chinese databases are not available used outside the Mainland China region

that makes the complete search difficult. Nevertheless, we still search for the studies in CNKI and Wan Fang, except for our 5 included trials [3–7], only one more randomized controlled trials (RCTs) was found according to our inclusion criteria: RCTs comparing the outcome of the application of acupuncture and sham acupuncture in patients with AIA, but this RCT was published after our meta-analysis delivery [8].

We certainly agree that the acupuncture group was often given verbal cues, but the sham acupuncture group might not have those feelings. In our review, we had mentioned that masking was not successful in Oh et al. [7], because more than 70% of participants in the sham group believed that they received sham acupuncture procedure. However, we reserved the rating as double blinded in other 4 RCTs [3–6] because the sham acupuncture procedures are internationally recognized the closest approach to maintaining patient blinding.

Finally, because the included RCTs were focus on the effect of pain control of acupuncture, patient-reported outcomes such as Western Ontario and McMaster Universities Osteoarthritis Index (WOMAC) dimensions and Brief Pain Inventory (BPI) were used for the primary measurement, such condition may increase the risk of bias. We had emphasized this issue in the Limitation section.

Competing interests

The authors declare that they have no competing interests. The views expressed in this manuscript are those of the authors and do not necessarily represent the views of the Shuang Ho Hospital, Taipei Medical University.

Authors' contributions

All the authors contributed equally to the response.

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References

- [1] Zhang K, Tang Q. Acupuncture on aromatase inhibitor-induced arthralgia in patients with breast cancer. *Breast* 2019;45:119.
- [2] Chen L, Lin CC, Huang TW, Kuan YC, Huang YH, Chen HC, Kao C-Y, Su C-M, Tam K-W. Effect of acupuncture on aromatase inhibitor-induced arthralgia in patients with breast cancer: a meta-analysis of randomized controlled trials. *Breast* 2017;33:132–8.
- [3] Bao T, Cai L, Giles JT, Gould J, Tarpinian K, Betts K, Medeiros M, Jeter S, Tait N, Chumsri S, Armstrong DK, Tan M, Folkard E, Dowsett M, Singh H, Tkaczuk K, Stearns V. A dual-center randomized controlled double blind trial assessing the effect of acupuncture in reducing musculoskeletal symptoms in breast cancer patients taking aromatase inhibitors. *Breast Canc Res Treat* 2013;138(1):167–74.
- [4] Crew KD, Capodice JL, Greenlee H, Brafman L, Fuentes D, Awad D, Yann Tsai W, Hershman DL. Randomized, blinded, sham-controlled trial of acupuncture for the management of aromatase inhibitor-associated joint symptoms in women with early-stage breast cancer. *J Clin Oncol* 2010;28(7):1154–60.
- [5] Mao JJ, Xie SX, Farrar JT, Stricker CT, Bowman MA, Bruner D, DeMichele A. A randomised trial of electro-acupuncture for arthralgia related to aromatase inhibitor use. *Eur J Cancer* 2014;50(2):267–76.
- [6] Mao JJ, Farrar JT, Bruner D, Zee J, Bowman M, Seluzicki C, DeMichele A, Xie SX. Electroacupuncture for fatigue, sleep, and psychological distress in breast cancer patients with aromatase inhibitor-related arthralgia: a randomized trial. *Cancer* 2014;120(23):3744–51.
- [7] Oh B, Kimble B, Costa DSJ, Davis E, McLean A, Orme K, Beith J. Acupuncture for treatment of arthralgia secondary to aromatase inhibitor therapy in women with early breast cancer: pilot study. *Acupunct Med* 2013;31(3):264–71.
- [8] Hershman DL, Unger JM, Greenlee H, Capodice JL, Lew DL, Darke AK, Kengla AT, Melnik MK, Jorgensen CW, Kreisler WH, Minasian LM, Fisch MJ, Henry NL, Crew KD. Effect of acupuncture vs sham acupuncture or waitlist control on joint pain related to aromatase inhibitors among women with early-stage breast cancer. *J Am Med Assoc* 2018;320(2):167–76.

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