

Reviewer's comment

reviewer 1

1. In the Introduction section, it would be appropriate to add possible causes of this condition and distinguish the main types of CRPS. Herein, it should be further specified that in this particular instance, most likely CRPS type 1 was diagnosed and treated.

Answer

Thank you for your helpful suggestion. In line with your suggestion, we have added further explanations regarding the general types of CRPS and possible pathogenesis of the disease in the introduction section. Furthermore, in the Final Diagnosis section we have specified the diagnosis is to CRPS-I.

2. Although significant pain relief and improvement of function were achieved, it remains yet unclear to what extent the effects of Traditional Chinese medicine participated in the outcome; therefore, the patient's conventional treatment continued throughout, as is stated in the manuscript limitations. Furthermore, it needs to be clarified if all of the traditional Chinese modalities were effective, more exactly, if their effect was cumulative, amplifying, or else, because of lack of data for this specifically.

Answer

We totally agree with the reviewer's comment regarding the fact that the specific effects of the individual TCM modalities cannot be clarified in this case report. Therefore we have added further information about this problem as a limitation in the Discussion section and made suggestions for future studies.

3. The effects of Acupuncture in pain management are promising and quite explored; however, pain exposure in patients suffering from CRPS remains controversial; thus, pros and cons should be considered. On the other hand, the safety of Pain exposure therapy in patients with CRPS has been supported by several studies; likewise, nonetheless, their scope was pain produced via physical therapy approaches that do not penetrate skin layers. Therefore, caution is in place, especially if the acupuncture points are located in the affected areas.

Answer

As described in several papers^{1,2}, the goal of pain exposure physical therapies (Ex. PEPT, EX P) is mainly directed at a functional change, to increase the active and passive range of motion of the patient's body, or to reduce disability by controlling 'fear'. The main rationale of the treatment is that pain is a 'false warning sign' of the nervous system instead of a symptom of ongoing tissue injury. It emphasized the role of cognitive-behavioral effects and readjustment of a patient's expectations about the association between movements and pain.

However, general acupuncture treatment is different from pain exposure therapy. The mechanism of pain modulation through acupuncture has been reported in various studies, including mod

ulation of pro-inflammatory agents, descending inhibitory effect, and antioxidative effects among others^{3,4}. Further, penetration is just one of the therapeutic components considered during acupuncture treatment. Many sham-acupuncture procedures also include the process of penetration. Furthermore, the process of piercing the skin during acupuncture treatment does not focus on intentionally inducing pain. Several case reports and reviews have reported the possible effect of acupuncture on CRPS; moreover, there are no severe side effects or critical results due to the treatment.⁵

We agree with your comment that caution is needed when treating affected areas with acupuncture and further studies are needed to validate the effect and safety of acupuncture in patients with CRPS. However, if additional change should be made in the manuscript concerning this topic, we would happily make the adjustments. Please feel free to provide comments or suggestions to help enrich this article further

4. In the Conclusion section, it seems too courageous to recommend a treatment based on a single case report. A more subtle choice of words would be preferable. In addition to the phrase "alternative treatment", a "supplementary treatment" would be more suitable, owing to the fact that these treatments don't contradict each other and the separate use of Traditional Chinese medicine in the treatment of this condition might lead patients into unnecessary suffering. The combination of conventional and Traditional Chinese medicine is promising and can improve the overall quality of life for patients suffering from CRPS remarkably; however, further research is necessary for validation and guidelines formation by the rules of EBM.

Answer

We have edited the conclusion section in line with your suggestion. We have chosen more moderate language in our selection of words and have suggested avenues for future research.

References

1. Ek JW, van Gijn JC, Samwel H, van Egmond J, Klomp FP, van Dongen RT. Pain exposure physical therapy may be a safe and effective treatment for longstanding complex regional pain syndrome type 1: a case series. *Clin Rehabil*. 2009;23(12):1059-1066.
2. den Hollander M, Goossens M, de Jong J, et al. Expose or protect? A randomized controlled trial of exposure in vivo vs pain-contingent treatment as usual in patients with complex regional pain syndrome type 1. *Pain*. 2016;157(10):2318-2329.
3. Goldman N, Chen M, Fujita T, et al. Adenosine A1 receptors mediate local anti-nociceptive effects of acupuncture. *Nat Neurosci*. 2010;13(7):883-888.
4. Yu WL, Park JY, Park HJ, Kim SN. Changes of local microenvironment and systemic immunity after acupuncture stimulation during inflammation: A literature review of animal studies. *Front Neurol*. 2023;13:1086195. Published 2023 Jan 11.
5. Gabriel T, Klose P. Komplementäre Verfahren in der Behandlung des komplexen regionalen Schmerzsyndroms [Complementary methods in the treatment of complex regional pain syndrome] [published online ahead of print, 2023 Jun 2]. *Schmerz*. 2023;10.1007/s00482-023-00724-7.

reviewer 2

1. This single case report does not have significant impact to report.

Thank you for your time, consideration of our paper, and for your comments.

Although a single case report does not provide significant evidence for treatment, considering the lack of a definitive intervention for the CRPS and the small absolute number of articles regarding complementary or alternative treatments on CRPS, we believe that this study may provide some additional approaches for CRPS research and in clinical settings. Future studies can consider combining TCM and conventional medicine for the management of patients with CRPS whose symptoms are refractory to conventional treatment alone. We are absolutely happy to make additional adjustment to the paper if needed. Please feel free to provide comments or suggestions to help enrich this article further.

2. English should be fully reviewed by native English speakers.

We have entrusted English proofreading to a professional company, and an editing certificate has been attached.

3. VAS is scale, not point.

We have edited the word 'point' as you suggested.

We look forward to hearing from you and would be happy to make further changes, if required.

Reviewer's comment		
1	Reviewer's comment	1. In the Introduction section, it would be appropriate to add possible causes of this condition and distinguish the main types of CRPS. Herein, it should be further specified that in this particular instance, most likely CRPS type 1 was diagnosed and treated.
	Before modification	Based on the Budapest criteria, the patient was diagnosed with CRPS
	After modification	Generally, CRPS is categorized into two types: CRPS-I and CRPS-II. In cases of CRPS-I, there is no confirmed nerve injury, whereas CRPS-II is associated with nerve damage(3). Although CRPS may be caused by dysfunction of the central and peripheral nervous systems due to factors such as inflammation, imbalance in the autonomic system, or autoimmune diseases, its exact pathogenesis is still poorly understood. Owing to its poorly understood pathogenesis, there are no specific diagnostic tests for CRPS; therefore, in clinical practice, it is diagnosed based on the patient's symptoms and clinical findings. Furthermore, although CRPS is a chronic condition associated with multiple painful symptoms and long-term disability, optimal treatment options are yet to be established.

		After several examinations, no other diagnosis could explain the patient's signs or symptoms; furthermore, there was no evidence of nerve damage. Based on the Budapest criteria, the patient was diagnosed with CRPS-I.
	Note	Additional explanations about the type and possible pathogenesis have been added, and the final diagnosis was specified.
2	Reviewer's comment	2. Although significant pain relief and improvement of function were achieved, it remains yet unclear to what extent the effects of Traditional Chinese medicine participated in the outcome; therefore, the patient's conventional treatment continued throughout, as is stated in the manuscript limitations. Furthermore, it needs to be clarified if all of the traditional Chinese modalities were effective, more exactly, if their effect was cumulative, amplifying, or else, because of lack of data for this specifically.
	Before modification	Because of the combination of treatments, it is difficult to determine the exact therapeutic effects of these treatments. Second, conventional medicine was continued during TCM treatment.
	After modification	Because of the combination of treatments, it is difficult to clearly distinguish the effects of individual treatments. It is also not possible to determine whether the effects observed are due to the simple sum of the treatments or the amplification of the treatments. Further clinical trials are needed to compare the effects of individual treatments on CRPS. Second, the administration of conventional medications was continued during TCM treatment. Therefore, although significant improvements were seen after the utilization of TCM treatments, the therapeutic effects observed cannot be conclusively judged to be the effects of TCM alone; however, the effects observed could be the combined or cumulative therapeutic effects of conventional and complementary medicine.
	Note	In line with the reviewer's comment, additional details have been added to the limitation subsection.
3	Reviewer's comment	In the Conclusion section, it seems too courageous to recommend a treatment based on a single case report. A more subtle choice of words would be preferable. In addition to the phrase "alternative treatment", a "supplementary treatment" would be more suitable, owing to the fact that these treatments don't contradict each other and the separate use of Traditional Chinese medicine in the treatment of this condition might lead patients into unnecessary suffering. The combination of conventional and Traditional Chinese medicine is promising and can improve the overall quality of life for patients suffering from CRPS remarkably; however, further research is necessary for validation and guidelines formation by the rules of EBM.
	Before modification	Despite the limitations of a single case report, this case recommends combined TCM treatment for patients with CRPS, which showed a significant effect on overall symptoms and no significant adverse events. Therefore, the TCM approach should be considered as a safe alternative treatment for CRPS.
	After modification	Despite the limitations of a single case report, the findings of this case recommend the use of combined TCM treatment as adjuvant therapy for patients with CRPS, as it produced significant improvements in symptoms and had no significant adverse effects. The combination of conventional medicine and TCM is promising and can improve the overall quality of life of patients with CRPS. Therefore, the TCM approach should be considered a safe supplementary treatment for CRPS. Further research is needed to verify the effect of the treatment modality of TCM and validate the efficacy of the treatment.
	Note	The conclusion has been edited in line with the reviewer's suggestion.
4	Reviewer's comment	VAS is scale, not point.

	Before modification	a 7-point decrease in the VAS score
	After modification	a <u>significant</u> 7-degree decrease in the VAS score
	Note	The word has been revised.