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IJBLS 2022; 1(2):60-64



International Journal of
BioLife Sciences

Original paper

Wet Cupping Therapy for Improving Quality of Life (QOL) in Hypertension Survival

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Received: 2 October 2020

Revised: 17 November 2020

Accepted: 3 December 2020

Abstract

Background and aim: Wet Cupping Therapy (WCT) is an ancient therapy which has been worldwide used and being recommended in the Islamic religion. Wet cupping therapy has been proved to be effective in decreasing physical problem related to the hypertension such as pain, headache, yet psychological problem such as anxiety which were indicators of the quality of life.

Materials and methods: This study used quasi-experimental approach with pre-posttest control group design. 32 respondents were included in this study chosen by using simple random sampling technique. Instrument used was WHOQOL-BREF which included four domain consists of physical, psychological, social, and environmental with 26 question items. Cupping therapy in this study used Cupping Puncture Cupping (CPC). Data analysis used Wilcoxon and Mann-Whitney.

Results: Results showed that there was significant improvement in physical domain of quality of life (p value 0.001), and psychological domain (p value < 0.001), social domain (p value 0.001), and environmental domain (p value 0.001) after cupping therapy has been applied. Cupping therapy has proven to be effective in improving the quality of life of hypertension patients.

Conclusion: Wet cupping therapy (Hijama) was effective in improving all domain of the quality of life in hypertension patients after a month intervention. Finally, this study found that there was a meaningful effect of wet cupping therapy application in improving quality of life of the hypertension patients. Cupping therapy is suggested to be applied as the complementary therapy for the hypertension patients as follow the prophet hadith.

Keywords: *Wet Cupping, Quality Of Life, Hypertension Survival*

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Introduction

Wet Cupping Therapy (WCT) is an ancient therapy which has been worldwide used and being recommended in the Islamic religion. Wet Cupping Therapy is the best solution for Moslems, since Prophet Muhammad said: “*The best of your treatment is Al-Hijamah (Cupping therapy)*”. Scientifically, cupping therapy can be used in preventive, curative, and rehabilitative effort. Cupping therapy has been proved to be effective in controlling blood pressure and decrease the symptoms related to the hypertension, such as pain, headache, physical weakness, anxiety, and stress which were indicators of the quality of life [1], [2], [3], [4], [5]. In the previous study, cupping therapy has been proved to be effective in improving physical and other domain of quality of life [6]. Wet Cupping therapy also effective in decreasing physical pain, anxiety, and depression in hypertension and CFS patients [7], [8].

Regarding to the background above, wet cupping therapy has been proved to be effective in decreasing physical problem related to the hypertension such as pain, headache, yet psychological problem such as anxiety which were indicators of the quality of life.

Material and Methods

This study used quasi-experimental approach with pre-posttest control group design. 32 respondents were included in this study chosen by using simple random sampling technique. Instrument used was WHOQOL-BREF which included four domain consists of physical, psychological, social, and environmental with 26 question items. Cupping therapy in this study used Cupping Puncture Cupping (CPC). The process consists of several steps. First, disinfect the cupping therapy used alcohol, place the cupping cup on the cupping point and applying first suction for period of 5 minutes, the cup then removed smoothly, and then puncturing for 20 spot being applied. The second suction was in the period of 7 minutes, the cup removed smoothly and then disinfect the bleeding area, continued with applying olive oil in the remaining area of cupping point. Cupping therapy has been applied in 3 points, 2 points in the area of behind the neck around the sternocleidomastoid muscle (Al Akhda'in). The other point was around the processus spinosus cervicalis vertebrae VII, named as Al Kahil point. Those three points were recommended in the Islamic cupping therapy method. Data analysis used Wilcoxon and Mann-Whitney.

Results

Results showed that there was significant improvement in physical domain of quality of life (p value < 0.001), and psychological domain (p value < 0.001), social domain (p value < 0.001), and environmental domain (p value < 0.001) after cupping therapy has been applied. Cupping therapy has proven to be effective in improving the quality of life of hypertension patients.

Discussion

One of the common symptom for the hypertension was pain in the area of neck. The pain happened for long lasting and will produce anxiety, depression, and sleep disturbance, also affect the patient's activity and productivity. This condition without any treatment will decrease the patient's quality of life [9], [10]. Our study showed that there was improvement of hypertension patient's quality of life indicated by the increasing score of physical, psychological, social, and environmental domain after treated by the wet cupping therapy. This finding support the previous finding that mentioned the effective cupping therapy for increasing chronic disease patient's quality of life, especially for pain [11], [6], [12]. Other study from Lauche et al. 2013 reported that cupping therapy significantly improved the quality of life at the physical domain of the non-

specific chronic neck pain in Tromso, Norwegia [13]. Previous study also mentioned that wet cupping therapy was effective modality therapy for pain [14], [15]. Wet cupping therapy also proved to be effective in decreasing pain, which might affect to the improving the quality of life especially for physical domain. The decrease of pain scale was influenced by the analgesic effect during cupping therapy. Wet cupping therapy can decrease the lactate acid, cortisol hormone and *P substance* of peripheral serum significantly [16], [17], [18]. Furthermore, local damage on the skin and capillary blood vessel in the cupping therapy process could stimulate the nociceptive to activate Diffuse Noxious Inhibitory Control (DNIC) [19].

In the first suction on the skin, skin will stimulate the nerve on the skin. This stimulation will be forwarded to the cornu posterior medulla spinalis through A and C delta nerve, also spinothalamic tract directed to the thalamus which will increase the β endorphin. Furthermore, the effect of negative pressure in the first suction and scarification will stimulate keratinocyte cells in the skin to increase HSP 70 (Heat Shock Protein) and β endorphin [20], [21]. Increasing endorphin hormone will increase the patients comfort which also can decrease the pain. Instead decreasing the pain scale, wet cupping therapy also proved to improve the sleep quality [22]. Sleep quality also being an indicator of the physical domain.

Together with the physical domain, in this study found that there was increasing in psychological domain of quality of life. Psychological problems which common in hypertension patients including anxiety, fear, and depression. Previous study proved that cupping therapy was effective on decreasing the anxiety in hypertension patient [7]. The cupping therapy effect to the anxiety happened due to of β endorphin secretion (endogen opioid analgesic) and adrenocortical hormone which expressed to the circulation after trauma on the skin during cupping therapy process. Opioid endogen and neuropeptide expression also produced the analgesic effect on the skin scar tissue [23]. Yet the endorphin also produced anxiolytic effect together with analgesic effect [24].

Social and environmental domain of the quality of life also increased after cupping therapy intervention in this study. Improvement on the quality of life at the social domain happened due to of decrease the hypertension symptoms after cupping therapy, which made patients more comfort and easier to fulfill their daily activities. This finding was supported by [25] that proved the improvement in human social aspect of quality of life after given by the cupping therapy. Improvement in the human social aspect of quality of life happened through the increasing of ADL patients.

Conclusion

Wet cupping therapy (Hijama) was effective in improving all domain of the quality of life in hypertension patients after a month intervention. Finally, this study found that there was a meaningful effect of wet cupping therapy application in improving quality of life of the hypertension patients. Cupping therapy is suggested to be applied as the complementary therapy for the hypertension patients as follow the prophet hadith.

Acknowledgment

We thank and appreciate all those who helped us in conducting this research.

Conflict of interests

The authors state that there are no conflicts of interests regarding the publication of this paper.

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