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Case Report

Clinical effectiveness of acupuncture at Liv3 as complementary therapy for relieving pain at dysmenorrhea

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ABSTRACT

Objective: To report clinical effectiveness of acupuncture at Tai Chong (Liv3) as complementary therapy for relieving pain at dysmenorrhea.
Method: A single case of a 34-years-old female with dysmenorrhea. Single point selected was Liv3.
Results: After three times treatments; pain (cramp), nausea, migraine gradually disappear.
Conclusion: Acupuncture therapy in Liv3 effectively helps to relieve pain at dysmenorrhea.

Dysmenorrhea is a period pain that commonly occur in women, following with painful cramps during menstruation, especially for young women and or reproductive age [1,2], classified as primary and secondary dysmenorrhea [3]. More than half of all girls and women suffer from dysmenorrhea [4]. Primary dysmenorrhea characterized different with secondary dysmenorrhea, but both of them are associated [3,5]. Late prevalence study for dysmenorrhea founded 43–91% on woman age under 20 and 16, 8–81% in general [6,7]. Chronic diseases, like dysmenorrhea, can decrease or even loss productivity [8]. Nonsteroidal anti-inflammatory drugs (NSAID) often used as initial therapy, even though it related with many kind of side effect [2,9]. Instead of using NSAID or pharmacological drugs, there are therapy for dysmenorrhea, called acupuncture and acupressure [2,10]. There had been many manners use to overcome pain caused by dysmenorrhea [11,12], but still not perfect.

Acupuncture, is the insertion of fine needles to acupuncture points by means of pressure, usually applied by finger or thumbs and all procedure nor standard provided [13–15]. Acupuncture can be compared to few medication, such as NSAIDs, combined oral contraceptives (COC), juyuansuan tamoxifen (JT), and acupuncture give significant effect rather than other medications also give increasing the quality of life [16]. Somehow, late study and general therapy by using acupuncture treatment at dysmenorrhea involve multipoint needles insertion [17–19]. Few points that lately used as acupuncture point for dysmenorrhea, including Sp6, Sp8, Bl32, Bl17, St36, Li4, Cv3, Cv4, Cv6, Gb39, Gb41, Si3, Bl66, Si2, Ex8 and Liv3 [16,19–31]. This paper is aiming to report clinical effectiveness of acupuncture at Liv3 as complementary therapy for relieving pain at dysmenorrhea. Also from this report will be known the effect of single point needle insertion on LIV3, which the point far from the trunk, ease to be performed, even if by a Doctor who do not understand acupuncture, because a Doctor will know anatomy so well.

Material and methods

General information

This study was taken from patients who came to clinic. Patients who come to clinic are not just dysmenorrhea, so there was no specific schedule for recording patients with video. Also, not all patients were willing to be recorded using video. So, the individual determination that will be presented in this study was random, incidental and meets ethic feasibility, meaning the patient was willing and not forced. The patient realizes and comprehends what will be done to her. The patient also conceives why the recording was done. One of the goals was the case itself provides scientific

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data for acupuncturist, physicians and other medical practices to take similar steps therapies. Patients agree. Patient educated. The patient was willing to follow the progress of her illness, her evaluation. The patient was willing to tell the doctor state of the truth. Patients came for control, more than once after the first therapy. Patients were glad to inform her progress.

Patients complained of pain during menstruation (dysmenorrhea). This complaint has been a long time, since before marital. Due to menstrual pain, patient could even up to 1–2 days lie down, unable to wake up. Patient usually took analgesic for relieving pain, for example spasminal. According patient's information, on several times of gynaecological check-up, no cysts, no uterine myoma or other disorders were found. The patient ever had an ectopic pregnancy, in the right side fallopian tube at the end of year 2010. Ectopic pregnancy broke out on 1 February 2011 at 8 weeks gestational age. The right side fallopian tube was removed. Until this report patient never got pregnant anymore. The therapy performed using Liv3 point. While the patient under therapy, she was recorded using camera video phone, Android Samsung Galaxy 7.0, model; SMG930FD, version; NRD90M.G930FXXS2DRAB. Anamnesis did in Surabaya, on East Pandugo Street XIII No. 16, the private practice. On behalf of Dr. Abdurachman, license no. 503.446/3331/1/IP.DU/436.6.3/2015.

Table 1
The patient's recovery progress from therapy.

Day of therapy	Acupuncture point	Dysmenorrhea	Progress
1st			No nausea – headache appear, from pain scale 7 (scaled 1–10) suddenly disappearing – only the trace pain remains
2nd			Mild cramp, spot showed, no migraine anymore after waking up in the morning
6th	LIV 3	Secondary	Cramp reduced to scale 1–2 from scale 10 (using scale 1–10), migraine just appearing one time since last control, suspected due to excessive activity and delayed meals. Menstruation appears as the fresh blood, previously appeared as darkish matter. From last control, not using pain-killer anymore.
9th			A migraine and menstrual pain gradually disappear

Note: Patient could not come to be evaluated every day be in accordance with her dealings.

Methods

Treatment methods

While interviewing anamnesis was taken, the patient received therapy conducted by Dr. Abdurachman. The surface that has to be treated was sterilized using cotton alcohol 70%. The acupuncture's needle Huang-Qiu 0.25×0.25 was inserted perpendicular at Liv3 point. Liv3 corresponds to liver meridian according to meridian theory in acupuncture. The needle rotated to the left and right undergo the insertion of the needle itself. The deep of needle reaches 2/3 parts. Related to anatomy, point Liv3 located on the dorsum of the foot in a depression, distal to the junctions of the 1st and second metatarsal bones. Therapy was done for 8 seconds on Liv3 point. The patient was asked about the complaints of her pain, meantime documented use video. The therapy was done for four times. Each therapy progress were video documented and recorded (supplementary) (Table 1).

Results

This case report began from the date of January 10, 2018, and divided into 4 sessions of therapy from the date of 10, 11, 15 and 18 of January 2018. Until the menstrual period of March 2018, patient no had similar complaints. The information comes through doctor-patient communication via WhatsApp on month before this paper submitted. Acupuncture therapy using Liv3 point on dysmenorrhea, resulting significant qualitative progress as shown in Table 1.

Discussion

Pain has a valuable role in the medical action, as the symptom par excellence and, therefore, as a precious and meaningful tool [32]. Pain itself based on the duration, classified as chronic and acute [32] Chronic pain is a disabling condition which reported, chronic pain affects every aspect of a patient's life, contributing to a loss of both physical and emotional function, affecting a patient's levels of activity (ability to work at home and job and engage in social and recreational pursuits) [33]. Pain divided into somatic and visceral. True visceral pain arises as a diffuse and poorly defined sensation usually perceived in the midline of the body, at the lower sternum or upper abdomen [34] Psychophysics of visceral pain differs from somatic pain, and it needs to examine carefully while the neurological mechanism of somatic pain cannot extrapolate to visceral pain without qualification [35]. As said before, dysmenorrhea divided into primary and secondary. Primary dysmenorrhea contains characteristic symptoms that occurred within 8–72 h of menstruation like crampy, colicky spasm of pain in the suprapubic area, and also peaking within the first few days as menstrual flow increases [16]. Headache, nausea and vomiting are the sign of prostaglandins and others metabolites entering general circulation [36].

Nowadays, acupuncture often used as secondary therapy for dysmenorrhea. Little effect at dysmenorrhea therapy by using acupuncture is descended pain modulation, increased uterine blood flow through ovarian sympathetic nerve reflex, and changed prostaglandin levels [16]. There is proposed hypothesis by the year of 2010 that descended pain in primary dysmenorrhea occurs by stimulating of common acupuncture points, including REN4, SP6, and SP8 that transmit signals via afferent pathways to the midbrain [37]. From those late research on common acupuncture points (REN 4, SP6 and SP8), we will understand what is the golden goal by using acupuncture point at Liv3 is really comfortable for patients, especially for those who whore hijab as a Muslim. In another hand, by using this acupuncture point (Liv3), our case report showed that healing on dysmenorrhea is relatively fast, perfect and no recurrence at least during therapy period.

Conclusion

In this case study, acupuncture therapy in Liv3 effectively helps to relieve pain at dysmenorrhea.

Recommendation

The author recommended for other acupuncturists to utilize Liv3 as complementary therapy for relieving pain at primary dysmenorrhea. In another cases author also done it on secondary dysmenorrhea and got similar results. The author also recommended to physician who should have understood the anatomy of the foot well. This suggestion administered to get further evidence, that

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could enhance the use of Liv3 as complementary therapy at dysmenorrhea. The author had used Liv3 point to get the same effect for many times however not yet publish. For further more credible report, all of the patient's information data should be recorded since marital and long time before. The same complaint related dysmenorrhea should be evaluated by the time after therapy. In this case report, all those data still can't be provided because the patient came to Surabaya proper to visit her parents. Her daily occupation in Jakarta.

Disclosure statement

The authors declare that they have no conflicts of interest and no financial interests related to the material of this manuscript.

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Supplementary materials

Supplementary material associated with this article can be found, in the online version, at doi:10.1016/j.wjam.2018.07.003.

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