



WORKING WITH AUTISM CHILDREN USING ACUPUNCTURE METHOD

METODE AKUPUNKTUR PADA ANAK-ANAK DENGAN AUTISMA

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ABSTRACT

Background: Autism is a disorder with symptoms as a failure to develop normal social interaction with other people, impaired of communication and imaginative ability, followed by repetitive and stereotyped movements. Autism is a global issue that may a possible cause of generation lost, and economic burden to a country. Acupuncture as one of TCM (Traditional Chinese Medicine) technique is an option to improve the life quality of children with Autism. **Purpose:** To determine the syndrome pattern of children with autism and how acupuncture method works for children with autism, from the perspective of TCM. **Method:** Four examination methods are incorporated into nine ongoing-treatment subjects fit in autism classification from randomized special need cases. Subject characteristics are derived from allo-anamnesis. Needle acupuncture was the method of choice except one subject prefers laser acupuncture. The objective is to eliminate the phlegm, calm the heart fire, and tonify spleen. **Result:** after 3-5 sessions of treatment, parents reported speech improvement and reduction of compulsive self-stimulation behavior. Four subjects demonstrated speech improvement, 1 subject showed better focus and concentration, 1 subject indicated a reduction of compulsive self-stimulation behavior, 1 subject improved in obedience and improved comprehension was found in 2 subjects. **Conclusion:** Observation on nine subjects showed in general that they had phlegm harassing the heart and digestion problem due to spleen deficiency. This phlegm disturbed the heart functions, i.e. mental capacity including speech. Results from the treatments showed elimination of phlegm, cooling down the heart fire, and tonification of spleen improved speech, focus, comprehension, obedience, and reduction of compulsive self-stimulation behavior. Further research and study from the Chinese medicine perspective are needed..

ABSTRAK

Latar Belakang: Autisme adalah gangguan dengan gejala kegagalan perkembangan interaksi sosial normal dengan orang lain, terganggunya kemampuan komunikasi dan imajinasi, disertai gerakan-gerakan tubuh berulang. Autisme merupakan masalah global yang dapat menyebabkan hilangnya satu generasi, dan beban ekonomi negara. Akupunktur sebagai salah satu teknik TCM (Traditional Chinese Medicine) merupakan pilihan untuk meningkatkan kualitas hidup anak-anak dengan autisme. **Tujuan:** Untuk menentukan pola sindrom anak-anak dengan autisme, dan bagaimana akupunktur bekerja untuk anak-anak dengan autisme, ditinjau dari sudut pandang TCM. **Metode:** Empat cara pemeriksaan dilakukan terhadap 9 subjek yang memenuhi klasifikasi autisme dari kasus-kasus anak berkebutuhan khusus secara acak. Karakteristik subjek ditentukan berdasarkan alo anamnesis. Akupunktur jarum merupakan metode pilihan kecuali

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pada satu subjek menggunakan akupunktur laser. Akupunktur yang diberikan bertujuan untuk mengeliminasi dahak, menenangkan api jantung, dan menguatkan limpa. **Hasil:** setelah 3-5 sesi, orang tua melaporkan peningkatan kemampuan bicara, dan penurunan perilaku kompulsif dan stimulasi diri. Empat subjek menunjukkan peningkatan kemampuan bicara, 1 subjek dengan peningkatan fokus dan konsentrasi, 1 subjek mengalami penurunan perilaku kompulsif dan stimulasi diri, 1 subjek meningkat kepatuhannya, dan 2 subjek meningkat pemahamannya.

Simpulan: Observasi terhadap 9 subjek menunjukkan gambaran umum adanya dahak yang mempengaruhi jantung, dan gangguan pencernaan karena defisiensi limpa. Dahak ini mengganggu fungsi jantung, seperti kapasitas mental termasuk bicara. Hasil penanganan menunjukkan eliminasi dahak, meredakan api jantung, dan tonifikasi limpa meningkatkan kemampuan bicara, fokus, pemahaman, kepatuhan, dan menurunnya perilaku kompulsif dan stimulasi diri. Penelitian lebih lanjut dan studi dari sudut pandang TCM sangat dibutuhkan.

Kata kunci:

Autisme, akupunktur, bicara, perilaku.

BACKGROUND

Autism is a disorder with symptoms as failure to develop normal social interaction with other people, impaired of communication and imaginative ability, followed by repetitive and stereotyped movements (Carlson, 2013). A recent review from World Health Organization estimates a global median prevalence of children with autism is 62/10,000 or one child in 160 has an autism spectrum disorder (WHO, 2016). Many protocols of management have been incorporated yet but the number of incidence keeps rising, this finding demonstrates that Autism is a global issue that may a possible cause of generation lost, and economic burden for a country. In the United States of America, the total cost per year for children with autism is calculated between \$11.5 billion - \$60.9 billion (2011 US dollars) (CDC, 2018).

The most common treatment used is behavior and communication intervention, dietary, medical intervention, complementary and alternative medicine (CAM) (CDC, 2015). Acupuncture is one of the modalities incorporated in CAM. Unfortunately, acupuncture is not considered as a favorable method among autism society although various results of the research have proved the effectiveness of acupuncture for children with autism. The probable reasons could be: 1. Acupuncture is an invasive approach by a needle that may trigger the fear and trauma of the client and the family, 2. lack of understanding upon the mechanism of acupuncture and why it works, 3. lack of publicity as a complementary treatment for children with autism, 4. lack of articles that discuss autism pattern identification from the perspective of traditional Chinese medicine

Acupuncture was invented in China around 4000 years ago (Cheng and Deng, 1987). This method sees the human body as part of nature and it is interrelated with the environment. Disease emerges when the mutual relation between the body and its environment at the energetic (*qi*) level becomes imbalanced or disrupted (Wu *et al.*, 1997). The energy (*qi*) between the human body

and environment communicates through acupuncture points. Internally, *qi* among human visceral organs communicates at an energetic level through acupuncture points thus the so-called communication creates an invisible web which is known as "meridian". Since each meridian has a connection to a specific organ, then it bears the name of the particular organ for identification, for example, liver acupuncture meridian, it actually refers to 14 acupuncture points running along the medial side of tibia, femur, abdomen, and anterior of the thorax.

Acupuncture points act as a gate for energy communication between the external environment to the internal human body, and among visceral organs. Acupuncture points also act as a way to stimulate expelling pathogen, or to improve blood circulation and to tonify the energy (*qi*). In other words, to create balance within the human body. One research also shows that acupuncture stimulation can improve behavior disorders (Khongrum and Wattanathorn, 2015). One most forgotten step prior to any acupuncture treatment is to establish a pattern identification. There are 4 methods of examination: a) observation, b) inquiry, c) palpation, d) olfactory. Based on pattern identification then the treatment procedure is considered.

In TCM, the terminology of *wu chi* (five retardations) is commonly well accepted, and some symptoms of autism may fit with this idea (Zhang, 2010). *Wu chi* consists of: 1. *li chi* (standing up retardation), 2. *xing chi* (toddling retardation), 3. *fa chi* (hair-growth retardation), 4. *chi chi* (tooth-growth retardation), 5. *yu chi* (echolalia retardation)

The symptom of autism such as impaired communication or inability to speak may refer to phlegm fire harassing the heart. Heart function in traditional Chinese medicine is not just a mechanism of pumping out the blood or receiving back the way Western understanding may explain. In TCM, the heart is also seen as related to mental capacity as well as regarded the house of mind. This fact is aligned with evidence that a couple of stimulation of the acupuncture points along the heart meridian will improve behavior

disorder and focus enhancement. Spleen, lung, and kidney are the organs that ensure the smooth flow of body fluid. Spleen, in particular, has a distinctive role for transportation and transformation of energy, blood and body fluid. When one of those organs fail to run its role in body fluid circulation, and then phlegm is evident. In the case of autism, phlegm harasses heart, and creates fire and heat since heart element in Chinese medicine is fire. Because of it, this research to investigate syndrome pattern of Autism according to TCM, and to observe how acupuncture may improves the life quality of children with autism.

MATERIAL AND METHOD

Nine ongoing-treatment subjects fit in autism classification from randomized special need cases. Their characteristics were shown in Table 1:

High function subjects are able to communicate verbally while low function subjects are still unable to communicate verbally. Subjects from the first group have similarities; they have compulsive self-stimulation behavior; they either are enrolled to formal or non-formal education.

CASE ANALYSIS

From tongue observation, the high function group, they have sturdy, reddish tip tongue. On the other hand, the low function group it is difficult to observe the tongue as they are incapable to follow instructions. From the palpation method, one subject from the high function group shows a bloated abdomen.

From all subjects, pulse checking indicates 2 subjects with combination of bowstring pulse and astringent pulse at *chi* position, 4 subjects with combination of bowstring and slippery pulse, 1 subject with slippery pulse only, 1 subject with bowstring pulse only, 1 subject with combination of thin, bowstring, slippery and astringent pulse at *guan* position on the right.

In general, from the gathered subjects, they have typical characteristics: 1., the existence of phlegm, 2. excess heat in the heart, 3. digestion problem due deficiency qi and dampness in the spleen, or liver qi stagnation.

Needle acupuncture was the method of choice except one subject prefers laser acupuncture. The objective was to eliminate the phlegm, calm the heart fire, and tonify spleen. In order to achieve the objective, acupuncture points such as *Jianshi* P 5, *Zusanli* St 36, *Fenglong* St 40, *Shenmen* H 7 incorporated into the existence of phlegm and excess heat in the heart. *Yinlingquan* Sp 9, *Taibai* Sp 3 incorporated in any digestion problem due to deficiency of qi and dampness in the spleen, *Taichong* Lv 3, *Xuehai* and, *Sanyinjiao* Sp 6 incorporated to any liver qi stagnation cases. *Yamen* Gv 15 incorporated in any speech delay cases. All subjects received treatment minimum 10 sessions.

RESULT

After 3-5 sessions of treatment, parents reported speech improvement and reduction of compulsive self-stimulation behavior. In the more detailed report, 4 subjects demonstrated speech improvement, 1 subject showed better focus and concentration, 1 subject indicated a reduction of compulsive self-stimulation behavior, 1 subject improved in obedience and improved comprehension was found in 2 subjects.

DISCUSSION

Observation on nine subjects showed, in general, they have phlegm harassing the heart, digestion problem due to spleen deficiency. This phlegm disturbed the heart functions, i.e. mental capacity including speech. Results from the treatments showed elimination of phlegm, cooling down the heart fire, and tonification of the spleen that improve speech, focus, comprehension, obedience, and reduced compulsive self-stimulation behavior. Given the satisfactory results, acupuncture should be considered as a method of treating autism.

The advantages of acupuncture treatment: 1., relatively cheap and affordable as a treatment, 2., effective as a complement therapy, 3., may use a laser instead of needles; walking needle technique can be a choice to avoid trauma. The disadvantages of acupuncture treatment: 1., may create trauma to the children if using retained needle technique, 2. lack of professional availability, 3., lack of science acknowledgment. Lack of science acknowledgment is understandable since most of the research on acupuncture for children with autism mainly focused on the method or technique. There is hardly any research or article discussing pathomechanism and the cause of autism from the Chinese medicine point of view considering facts from the present finding.

Table 1. Characteristics of subjects

Age	Child (<12yrs) 7	Teenage (12-19yrs) 2
Sex	Male 5	Female 2
Education	School enrolled 3	Non-Schooling 6
Function	High 4	Low 5
Family history	Present 1	None 8

CONCLUSION

Considering the phenomenon of alarming, increasing number of autism in the world, further research and study from the Chinese medicine perspective are needed. The aim is not just to establish the curative protocol, but acupuncture is also helpful as preventive medicine. Acupuncture association, academic institutions, and professional societies should encourage the methods of research and forward the paradigm of the eastern point of view, from where acupuncture itself well rooted. Through TCM four examination method it showed that most of the cases involve the presence of phlegm. Phlegm occurs when transportation and transformation function of the spleen is impaired. Liver *qi* stagnation could be the cause of spleen dysfunction. This spleen dysfunction, later on, may affect digestion, and phlegm as the end result may disturb the heart's role as the house of mind.

Further research needed to determine the causal of liver *qi* stagnation in the incidence of autism. Hence in the future autism prevention can be done from the perspective of TCM through modern understanding.

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or patent-licensing arrangements), or non-financial interest (such as personal or professional relationships, affiliations, knowledge or beliefs) in the subject matter or materials discussed in this manuscript.

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