



Acupuncture treatment for patients with mild, moderate and severe Alzheimer's disease

Bo Ji¹, Guozhen Zhao¹, Bo Li², Yitian Liu¹, Nana Han¹, Yunpeng Ge¹, Yang Fang¹, Jingyu Zhang¹

¹Beijing University of Chinese Medicine, Beijing, China; ²Beijing Hospital of Traditional Chinese Medicine, Capital Medical University, Beijing, China

Correspondence to: Bo Ji. Beijing University of Chinese Medicine, No. 11, North 3rd Ring East Road, Beijing 100029, China. Email: jibo678@263.net.

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Caption of location and operation of acupoints (I)

Introduction to Alzheimer's disease (AD)

AD, also known as senile dementia, is a neurodegenerative disease characterized by latent onset and progressive cognitive impairment. The main manifestations are memory and cognitive dysfunction, often accompanied by mental, behavioral, and personality abnormalities. Constituting 60–80% of all dementia types, AD is the most common type of dementia.

A cross-sectional study published in *The Lancet Public Health Journal* in December 2020 (IF = 21.648) (1) showed that the prevalence of dementia among people over the age of 60 in China was 6.04%, and the total number of people with mild cognitive impairment and dementia was more than 53 million, among which 9.83 million had AD. It is a worldwide problem and is the fifth leading cause of death among the elderly.

There is currently no specific treatment that can reverse or prevent the progression of AD. Even with treatment, the patient's condition will gradually progress, usually over 8–10 years, but there are large differences between individuals, and some patients can survive for 20 years or longer. Most AD patients die from complications such as malnutrition, secondary infections, and deep vein thrombosis.

Problems to be solved

The multiple mechanisms of AD make it unsuitable for single factor therapy (2-4). Therefore, it is extremely urgent to seek a multi-target and multi-channel intervention method for the treatment of AD.

At present, the drugs for the treatment of AD mainly include: donepezil, galantamine, rivastigmine, memantine and aducanumab. These drugs can alleviate the symptoms of AD, but do not reverse the course of AD or cure AD (5). A previous meta-analysis indicates that acupuncture therapy may have a good effect for AD patients (6).

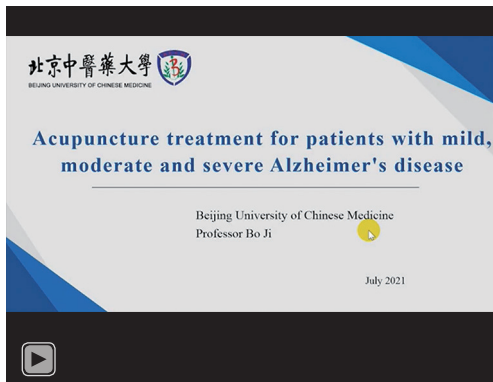
In Chinese medicine, AD belongs to the categories of “dementia”, “dullness”, and “forgetfulness”. Ancient physicians have long traced their understanding of dementia. Modern physicians usually start treatments from the aspects of invigorating the kidney and improving intelligence, activating blood and dredging meridians, and removing blood stasis and resuscitation, and so on, and have achieved some effects with this approach.

The disease is located in the brain (7,8), and the kidney, liver, heart, spleen, and other organs are involved in its pathology.

The basic pathogenesis is deficiency of brain marrow, ineffectiveness of the divine mechanism, and insufficiency of essence. The original deficiency is that of the spleen and kidney, insufficient qi and blood, and inadequate brain marrow, leading to cognitive problems caused by retained phlegm, blood stasis, fire, and internal retention of toxic substances, which disturb the brain.

The principles of treatment for AD with traditional Chinese medicine (TCM) are as follows: For the deficiency syndrome it is suggested to invigorate the kidney and spleen to nourish the marrow, and for the excess syndrome to resolve phlegm and blood stasis to improve the brain function.

In the Sanlian xingshen yizhi acupuncture, different interventions are given to targeted treatment in different



Video Acupuncture treatment for patients with mild, moderate and severe Alzheimer's disease.

parts in order to maximize the effect of acupuncture. Electric needles is used to the head. Acupuncture combined with electromagnetic wave therapy instrument is used to chest, trunk and limbs. The acupuncture points of the Sanlian xingshen yizhi acupuncture include Baihui (DU 20), Sishencong (EX-HN1), Yintang (DU 29), Danzhong (RN 17), Zhongwan (RN 12), Guanyuan (RN 4), Qihai (RN 6), Neiguan (PC 6), Taixi (KI 3), Sanyinjiao (SP 6), Zusanli (ST 36), Xuanzhong (GB 39) and Yanglingquan (GB 34). This video introduces Professor Ji Bo's clinical experience in treating AD with acupuncture, which has a remarkable effect, and hopes to provide new ideas and methods for clinical acupuncture treatment of AD.

Caption of location and operation of acupoints (II)

Four acupoints on the head

Bǎihuì (GV 20)

Location: 5 cun (bone proportional measurement) directly above the midpoint of the anterior hairline, or at the junction of the midline at the vertex with the line joining the 2 ear apices.

Needling method: Puncture subcutaneously 0.3–0.5 cun.

Sishéncōng

Location: A group of 4 points, at the vertex, 1 cun respectively posterior, anterior, and lateral to Baihui (GV 20).

Needling method: Puncture subcutaneously 0.5–1.0 cun.

Yintang

Location: Midway between the medial ends of the 2

eyebrows.

Needling method: Puncture subcutaneously 0.3–0.5 cun.

Fēngchí* (GB 20)

Location: In the depression between the upper portion of the sternocleidomastoideus muscle and trapezius muscle, and level with Fengfu (GV 16).

Needling method: Puncture with the needle tip slightly pointed downward, or toward the tip of the nose to a depth of 0.5–0.8 cun; or puncture transversely toward Fengfu (GV 16); do not puncture deeply upward and inward to prevent injuring the medulla.

Four acupoints on the trunk

Guānyuán (CV 4)

Location: On the anterior midline, 3 cun below the umbilicus.

Needling method: Puncture perpendicularly 0.5–1.0 cun after urination. Moxibustion is frequently advisable.

Qihǎi (CV6)

Location: On the anterior midline, 1.5 cun below the umbilicus.

Needling method: Puncture perpendicularly 1.0–1.5 cun after urination. Moxibustion is frequently advisable.

Zhōngwǎn (CV 12)

Location: On the anterior midline, 4 cun above the umbilicus.

Needling method: Puncture perpendicularly 1.0–1.5 cun.

Dànzhōng (CV 17)

Location: On the anterior midline, level with the 4th intercostal space.

Needling method: Puncture transversely 0.3–0.5 cun.

Six acupoints on the limb

Zúsānlǐ (ST 36)

Location: 3 cun below Dubi (ST 35), 1 finger width lateral to the anterior crest of the tibia.

Needling method: Puncture perpendicularly 1.0–1.5 cun.

Fēnglóng (ST 40)

Location: 8 cun above the external malleolus, 2 finger widths lateral to the anterior crest of the tibia.

Needling method: Puncture perpendicularly 1.0–1.5 cun.

Yánglíngquán (GB 34)

Location: In the depression anterior and inferior to the small head of the fibula.

Needling method: Puncture perpendicularly 1.0–1.5 cun.

Xuánzhōng (GB 39)

Location: 3 cun superior to the tip of the external malleolus, on the anterior border of the fibula.

Needling method: Puncture perpendicularly 1.0–1.5 cun.

Tàixī (KI3)

Location: On the medial side of the foot, posterior to the medial malleolus, in the depression between the tip of the medial malleolus and the calcaneal tendon.

Needling method: Puncture perpendicularly 0.5–1.0 cun.

Sānyīnjiāo (SP 6)

Location: 3 cun above the medial malleolus, on the posterior border of the medial aspect of the tibia.

Needling method: Puncture perpendicularly 1.0–1.5 cun.

Caption of display on acupuncture treatment (III)

This video shows the treatment of patients. Needling of the head points is applied to the first patient, and a combination of head and body points are needled on the second patient.

The video documents 2 patients who have entered stage III AD and were completely unable to take care of themselves before treatment, and were unable to communicate. The first patient, Chang, showed some reaction and interaction after 8 sessions of acupuncture treatment. The second patient, Sun, at the 14th session of acupuncture treatment, was able to eat independently with cutlery.

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