

head, belonging to the crossing of Du and bladder meridians, it can restore consciousness and nourish yang qi of the whole body. Taiyang point can dredge channels and collaterals and drive away the outer disease. Modern researches show that Baihui can enhance the motor center of the brain. Scalp penetrative acupuncture is a method with acupuncture through points and meridians to reinforce stimulus. This research suggests that scalp penetrative acupuncture has the function of reducing the 5-HT within sports fatigue big rats brain issue, reducing F-Trp level with serum, increasing content of BCAA within serum and extending exhaustive swimming time. And that maybe related with the mechanism of anti- sports fatigue by Scalp penetrative acupuncture.

## **Clinical Observation and Mechanism Study on the Neck Massage Treatment of Cervical Spondylosis of Vertebral Artery Type**

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**Abstract:** By adjusting the balance of middle neck muscle tension to reduce the stimulus at sympathetic nerve and to decrease the hyperfunction at it, and then through the vertebral plexus to relieve spasm of vertebral artery contraction. The technique treatment at neck central muscle group makes the central rigid neck muscles which are damaged recover smooth blood circulation, accelerate muscle aseptic inflammation metabolism, then remove the mechanical pressure at internal carotid artery, improve the blood circulation of internal carotid artery and vein near. Blood running smoothly internal carotid artery instead and substitute for the blood supply of vertebral artery to the head in a considerable degree. Alleviate the vestibular labyrinth of ischemia and vertigo which caused by the vertebral - basilar artery functional problems .The vertigo symptom relief.

**Keywords:** neck massage; vertebral artery type of cervical spondylosis

The subject of massage as a wide range of applications and significant effect in practical medicine, is under the guidance of Chinese medicine theory, a discipline also has its own characteristics, but for the greatness of the Chinese medicine theory is that the cause of vertigo and its mechanism is very complex, many factors are associated with cervical diseases, while the neck lesions both bone and joint or internal soft tissue and spinal canal, can make the sympathetic nerve stimulation. Through the vertebral artery plexus shrink vertebral artery spasm, causing vertebral - basilar artery functional problems, lead to the vestibular labyrinth of ischemia, vertigo symptoms. Main show is turned to have a sense of rotation, swing, the feeling of float, loss of position sense, and cataplexy, syncope, and so on.

Investigating and analyzing system of the history and current situation of massage theory and its foundation could found the reality of this theory. Comparison of massage science basic theory and basic theory of traditional Chinese medicine shows the present TCM basic theory of medical massage clinical guidance as to the lack of a better targeted. Improving the basic thorny of science of Chinese massage is one of the emphasis conclusions. From the principle, method, technique is put forward in the face of the disciplines basic theory of hierarchical reconstruction proposal.

### **Materials and methods**

Observe the curative effect of neck massage in the treatment of vertebral arterial cervical spondylopathy and the effect of TCD through the summary of clinical experience, and to explore its mechanism of action. The undergraduate course rooms over the years, 120 cases of vertebral artery type of cervical spondylosis patients were randomly divided into the neck massage in the observation group and the traditional massage method in the control group, 60 cases in each group.

Observe the changes of cervical vertigo symptoms and function before and after the treatment, the integral signs, TCD and adverse circumstances, and follow-up of March. And color Doppler and TCD before and after treatment, observation curative effect of hemodynamic changes and judgment. And color Doppler before and after treatment and transcranial Doppler (TCD) ultrasonic detection, and judge the curative effect observation of blood flow parameter change

Curative effect evaluation standard according to the "State Administration of Traditional Chinese medicine promulgated the "Disease diagnosis of TCM curative effect standard ". Cure -- symptoms, signs disappeared, can participate in normal labor and work; improvement of vertigo, reduce the symptoms of nausea, cervical curvature improvement, can carry out daily activities; invalid -- no improvement of symptoms and signs, cervical curvature no improvement. The standard is: ① cure: the symptoms and signs disappeared. Neck rotation syndrome, vertebral artery ultrasonography supine and neck rotation flow parameters in normal; ② effective: symptoms improved, neck rotation syndrome ( $\pm$ ), vertebral artery ultrasonography supine. Neck rotation flow parameters ( $\pm$ ); ③ no effect symptoms and signs: no improvement, neck rotation sign (+), ultrasound blood flow parameters had any obvious change.

### **Results and discussion:**

The observation group in improving the symptoms of the patients is better than the control group, the blood flow parameters of ultrasound did not change significantly, but the blood flow parameters of ultrasonography observation group on TCD sys parameters improved significantly, has generally decreased, the peak reduced.

The purpose of this study was to summarize the clinical experience of large, and explore the massage treatment of vertebral artery type of cervical spondylosis of the new theory and new method, exploration of massage treatment of cervical spondylosis of vertebral artery type, strong practicability, solve the traditional massage manipulation routines, in view of the present situation is not strong, has the important instruction significance for clinical. Solve traditional massage stereotypical past; the present situation of the pertinence is not strong. Has an important instruction for clinical significance .

Traditional massage manipulation techniques generally applied to patients with bladder meridian, meridian, also is the spine and both sides of the spine and soft tissue, there is blood stasis, Qi collaterals acetanilide detumescence and improve cervical and vertebral the role of the surrounding environment, but also can prevent the occurrence of ischemic cerebral vascular diseases. But the traditional massage manipulation techniques such as too routine, the condition is complex and changeable, divided into cervical spondylosis with the lack of pertinence, does not represent the characteristics of TCM syndrome differentiation and treatment. Our department after more than twenty years of clinical research experience, has formed a set of the cervical vertigo message system, including the spine and paraspinal soft tissues is different from the traditional. Exploring the corresponding methods such as sternocleidomastoid in neck and anterior scalene muscle department promotes the massage feels the importance of and internal carotid artery is put forward based on the central neck dissection compensatory theory. By adjusting the balance of middle neck muscle tension to reduce the stimulus at sympathetic nerve and to decrease the hyperfunction at it. And then through the vertebral plexus to relieve spasm of vertebral artery contraction. The technique treatment at neck central muscle group makes the central rigid neck muscles which are damaged recover smooth blood circulation, accelerate muscle aseptic inflammation metabolism, then remove the mechanical pressure at internal carotid artery, improve the blood circulation of internal carotid artery and vein near. Blood running smoothly internal carotid artery instead and substitute for the blood supply of vertebral artery to the head in a considerable degree. Alleviate the vestibular labyrinth of ischemia and vertigo which caused by the vertebral - basilar artery functional problems .The vertigo symptom relief.

Provide the basis through a large number of clinical accumulation and in-depth studies on the effectiveness of massage neck in treating cervical vertigo, traditional massage method for

improvement of cervical vertebra disease, make it more targeted, the subject of massage new basic theories, push forward the theory innovation massage science, and its application in clinical, provide clinical basis for the mechanism of action the further research of massage cervical area.

### References

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## Study on change of endogenous neural stem cells after spinal cord transection lesion treated by Jiaji electroacupuncture

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### Abstract

**AIM:** To investigate the effect of Jiajielectroacupuncture on endogenous neural stem cells after spinal cord injury(SCI)in rats and the mechanism .**METHOD:**96 female Wister rats were randomly divided into four groups:① sham operated group②the control group :spinal cord injury at T10 level by complete transection lesion method, ③Jiajielectroacupuncture treatment group after spinal cord injury, ④Jiaji electroacupuncture pre-conditioning treatment group, in which the rats were treat one week by Jiaji electroacupuncture before SCI. Judging the motor function of rats after SCI at 3,7,14dtime point refer to BBB score.The rats were killed at 3d,7d and 14d after SCI , the tissues were analyzed using immunohistochemical and real-time quantitative PCR detection to study the response of endogenous neural stem cells. **RESULT:** The changes of BBB score show that the treatment groups were better than control group at 7,14d time points( $P<0.05$ ). The number of Brdu, Nestin and GFAP positive cellsare different between four groups( $P<0.05$ ) at 3d,7d and 14d. Nestin, GFAPmRNA expression are different between four groups( $P<0.05$ ) at 3d,7d and 14d. **CONCLUSION:** The research verifiesthatJiajielectroacupuncture and Jiaji electroacupuncture pre-conditioning can promote proliferation of endogenous neural stem cells after spinal cord injury.

**Key words:**Jiajielectroacupuncture; Spinal transection lesion; Rats; endogenous neural stem cells

### Introduction

Spinal cord injury is a serious damage to the central nervous system, it often causes disability and even death, the traditional opinion think that adult mammalian central nervous system does not have the ability to update, and dose not renew after damage. In recent years, many studies found in adult mammals including humans the central nervous system has many neural stem cells (NSCs) which can renew and split apart<sup>[1]</sup>. Normally these NSCs are dormant,however they can proliferate and migrate to replace the necrotic nerve cell, repair necrotic lesions and restore neural function under the stimulus such as damage and ischemia .can activate such a series of changes, This is after spinal cord injury treatment brings new hope. As is known to all, the curative effect of Jiajielectroacupuncture after spinal cord injury(SCI) is good in clinical practice<sup>[2]</sup>. This experiment observe the proliferation of endogenous neural stem cells by using the treatment of Jiajielectroacupunctureafter spinal cord injury(SCI)in rats and search the mechanism of this treatment. Thereseearch providestheoreticalandexperimentalfunctionfor clinicaltreatmenttoSCI.

### Materials and methods

#### 1.1 Experimental animals and groups