

Progress in Acupuncture for Tinnitus

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Abstract: Tinnitus is the perception of phantom sound in the absence of a corresponding external sound source, which is relatively common in clinical practice. Tinnitus patients are usually aware of the ear clank, buzzing, doorbell and other abnormal sound. The etiology and mechanism of Tinnitus are still unclear, which makes the diagnosis and treatment of Tinnitus have not formed an exact unified plan. This article summarizes the treatment of tinnitus by acupuncture combined with related therapy, in order to provide a variety of treatment for clinical tinnitus disease reference scheme.

1. Introduction

In recent years, as China enters an era of rapid development and urbanization and industrialization continue to accelerate, people's lives and work pressures have become increasingly high, leading to a continuous increase in the incidence of tinnitus and an increasing trend year by year. It is often accompanied by symptoms such as insufficient attention, insomnia, anxiety, depression, etc., which seriously affects people's quality of life. The pathogenesis of Tinnitus is not yet clear, and there are many triggering factors. Western medicine believes that pathological changes in the cochlear nucleus, inferior colliculus, auditory cortex, and other brain regions may be the reasons for the formation and maintenance of tinnitus, and the limbic system may also be involved in the regulation of the tinnitus central system. Western medicine often uses methods such as antidepressants, vocal music, hearing aids, and transcranial magnetic resonance stimulation to treat tinnitus patients, but the efficacy has certain limitations and is expensive. Acupuncture, as a unique treatment for diseases in our country, has excellent therapeutic effects and minimal side effects in treating tinnitus diseases. The literature review on acupuncture treatment of tinnitus in the past 5 years is as follows.

2. Acupuncture Combination, Internal Internal to for Tinnitus

Common common acupuncture and oral Chinese medicine are combined to treat tinnitus. The acupuncture is mostly near ear needle and head needle, etc., and the distal part is mainly hand and foot Shaoyang meridians. The prescription of traditional Chinese medicine is mostly the methods of regulating liver qi, nourishing kidney and replenishing qi, and activating collaterals. Wang

Chenghui et al^[1] Seventy-four patients with liver depression and qi knot tinnitus were randomly divided into treatment group and control group. The control group was used with free powder for treatment, and the treatment group was combined with acupuncture on the basis of giving free powder. After the treatment, the disability scale score of tinnitus patients in the treatment group decreased more significantly than before the treatment. Chen Su Rong and Tan Xuming et al^[2] The included 60 patients with idiopathic tinnitus were divided into two groups. The traditional Chinese medicine group only received zhongqi Tang Magnezhu pill plus subtraction prescription, and the acupuncture group received local acupuncture and head acupuncture on the tinnitus side on the basis of the traditional Chinese medicine group. After treatment, the acupuncture group had obvious curative effect. Lu Yilan^[3] Sixty cases of neurological tinnitus were collected and divided into two groups. The treatment group was treated by acupuncture treatment. The treatment groups were treated for 1 to 3 courses. Zhang Zhigang^[4] This paper compares the difference between the acupuncture group and the joint group in tinnitus treatment. The acupuncture group mainly took the cervical ridge point and the local point on the affected side of tinnitus, while the joint group adopted the treatment method of acupuncture and traditional Chinese medicine dialectical prescription. Plus and decrease of Chen decoction; plus and decrease of blood circulation decoction; plus and decrease of qi and blood deficiency type; plus and decrease of liver decoction, which proved the significant effect of the combined group. Song Chunxia et al^[5] 40 cases of tinnitus with phlegm and blood stasis obstruction type were treated with acupuncture combined with traditional Chinese medicine and simple acoustic information therapy respectively. After treatment, the severity level of tinnitus in the two groups was reduced compared with that before treatment, and the method of acupuncture combined with traditional Chinese medicine was significantly better than that of the other group. Generally speaking, only the use of traditional Chinese medicine prescription or acupuncture treatment can relieve the symptoms of tinnitus somewhat, but the combination of the two seems to better solve the suffering of tinnitus patients in life and work.

3. Acupuncture is Combined with External Treatment to Treat Tinnitus

3.1 Acupuncture Combined with Bloodletting Therapy for Treating Tinnitus

Blood therapy, also known as “collateral puncture therapy” and “blood puncture therapy”, is a kind of special Chinese medicine acupuncture treatment technique for the treatment of collateral disease, “Su · Sutra theory” cloud: “ the disease in the pulse, the blood; the disease in the blood, the collateral. “bloodletting therapy can not completely cure all diseases, but it is effective for some diseases^[6]. The mechanism of tinnitus treatment by blood release therapy may be to improve the microcirculation of the cochlea, restore the function of central nervous cells, and regulate the level of serotonin in the blood, so as to improve the symptoms of tinnitus patients^[7-8]. Yao Yanling and Liu Hao^[9] People et al. compared Yifeng, Xinyu, liver yu puncture and blood release combined with acupuncture and simple acupuncture treatment of tinnitus, after 4 weeks of treatment, it was found that the former effect was more significant. Li Xin^[10] The inclusion in 60 cases of idiopathic tinnitus patients divided into test group and control group of 30 cases, the experimental group with acupuncture “ear” combined apex treatment of bleeding, control group simply using the treatment of acute liver fire strong empirical acupuncture “ear”, the experimental group and control group after 4 weeks of treatment, the experimental group curative effect is significant, and for idiopathic tinnitus patients with auditory allergy and ear symptoms also relieved. Bai Jie^[11] The 60 patients with tinnitus were divided into two groups. The observation group treated the patients with the press needle and the ear tip, and the control group was treated with the body needle. The results found that both methods significantly relieved the symptoms of the patients with the disturbance tinnitus, but the curative effect of the observation group was significantly better than that of the control

group. Jun-hong Chen^[12]Adopted two methods of treatment of phlegm fire depression type tinnitus patients, one is the acupuncture palace, listening, bone, zhu, too chong, one is on the basis of the acupuncture tip bleeding, both methods are treated 30 cases of the patients with tinnitus, after treatment, according to the tinnitus severity table and patient feedback, in the treatment of phlegm fire depression type tinnitus disease, acupuncture combined with ear tip bleeding method is better than simple acupuncture effect.

3.2 Acupuncture Combined with Acupoint Injection to Treat Tinnitus

Acupoint injection is a kind of integrated traditional Chinese and western medicine therapy invented in the 1950s with the interaction of drugs, acupoints and drugs and acupoints under the guidance of traditional Chinese and western medicine theory. Clinical use of acupoint injection therapy is often combined with some other therapies, such as drug acupuncture, Chinese medicine, massage and so on^[13]. Li Liang^[14]It was found that the affected rate of patients with acupuncture tinnitus was combined with acupoint injection in Fengchi, Listening palace, finished bone and aurlpoint, and the injection drug was Danmiltiorrhiza injection, and the total effective rate of this treatment method was 95.5%. Kong xiangfei^[15]Using the affected side of common acupuncture tinnitus patients (bilateral tinnitus patients), the ear hilia, listening palace, listening, rate valley, Jiaosun, bilateral Taixi, Zhongzhu combined with human placental tissue fluid acupoint injection of affected lateral Yifeng, and found that this method has significant effect. Dong Chunjiang^[16]Explore the treatment method of tinnitus in patients with kidney essence deficiency, and realize the significant curative effect of acupuncture combined with safflower injection acupoint injection into the local acupoints on the affected side. Li Yue Fang^[17]The 50 tinnitus patients treated were divided into two groups. The observation group used acupuncture and acupuncture injection for treatment, and the control group used acupuncture for treatment. The results showed that acupuncture injection combined with acupuncture could reduce the tinnitus severity of patients more than a single acupuncture.

3.3 Acupuncture Combined with Moxibustion to Treat Tinnitus

Moxibustion is an important therapy in Chinese medicine, which can achieve the effect of calming down through the effect of warming and tonic^[18]In order to warm and replenish the spleen and kidney, improve the spleen and kidney function and nourish the human body qi and blood. The spleen and kidney health are full of qi and foot spirit. At the same time, moxibustion can also prevent and treat diseases by helping the human body with healthy qi^[19]. Lu Yao^[20]The 62 patients who had neurologic tinnitus were divided into two groups. The control group was treated with conventional acupuncture. The treatment group was treated moxibustion on the basis of the acupuncture group. After treatment, the frequency of tinnitus in the treatment group was significantly reduced. Li li^[21]After comparing only oral melocobalamin tablets and acupuncture tube Liucong point combined with Tianzhu moxibustion, it was found that the microcirculation index (flow state, tube loop, haptic peripheral integral and total integral) of the acupuncture group were lower than that of the treatment group, and the total response rate of the acupuncture group was higher than that of the control group by 37.5%. Luo Ying^[22]The acupuncture method combined with Yongquan moxibustion was adopted to treat 34 patients with renal essence deficiency and tinnitus. After 3 courses of treatment, this method has significant curative effect. Wei-fang Chen^[23]Moxibustion combined with ume tonic therapy was used to treat 60 patients with renal essence loss of nerve tinnitus. After treatment, it was found that the tone and frequency of tinnitus in the patients were significantly reduced. Zhuang Keqing^[24]The combination of auricular moxibustion and acupuncture method treated 31 patients with neurological tinnitus, and found that

the severity score of tinnitus was lower than that of acupuncture alone.

3.4 Needle Acupuncture Combined with Ear Acupoint Application to Treat Tinnitus

The ear acupoints are closely related to the zang-fu organs and meridians of the whole body. Stimulate the corresponding ear acupoints can dredge the meridians of the body and regulate the function of the zang-fu organs^[25]. Eicular application has the advantages of simple operation and no pain^[26]. Liu Shuhong, Wang Jianming, etc^[27]After 6 weeks of treatment of 24 tinnitus patients, it was found that the clinical efficacy of acupuncture combined with Wang Shuizai ear point application and Daactive Dan Shenque drug application was significantly better than that of conventional western medicine group. Yu-yun li^[28]The collected 120 tinnitus patients were divided into treatment group (acupuncture combined with ear sticking) and control group (conventional western medicine). After three courses of treatment, it was observed that acupuncture combined with ear sticking could improve clinical efficiency. Shi State minister, Wei Ming^[29]It was found that the combination of electroacupuncture and ear point seed pressure could reduce the clinical symptoms of tinnitus patients more than western medicine treatment. Liu Minjuan and Xu Mingjun^[30]After the treatment of 52 cases of nerve tinnitus patients, the treatment effect of this method is obviously better than that of conventional drugs. Xia-ping shao^[31]Meanwhile, 32 cases of tinnitus patients were treated with electroacupuncture. After treatment, the tinnitus of the patients was significantly improved, and the hearing was also restored to some extent.

4. Acupuncture is Combined with Special Therapy to Treat Tinnitus

Lu Zeqiang and Lu Jiaming^[32]Using massage techniques, take and other massage massage tinnitus patients with lateral ear door, ear listening, Yifeng and combined with acupuncture therapy, after treatment found that acupuncture combined with massage therapy than conventional oral flurarizine hydrochloride capsules, vitamin B1 tablets, vitamin B12 tablets 24.2% higher effective rate. Dai Meiling^[33]Angle tuning Chinese classical music therapy combined with acupuncture was used to treat 36 patients with liver stagnation and qi knot tinnitus. After the treatment, the score of tinnitus disability scale was significantly reduced, and the score was lower than that of acupuncture alone. Marie et al^[34]In patients with acupuncture nerve tinnitus, people used the pinching nasal bulging method, asking the patient to close the mouth, hold the nose and exhale with the nose to stimulate the eardrums. After treatment, compared with simple acupuncture method, it was found that the recovery rate of acupuncture combined with pinching nasal bulging method was obviously better than that of simple acupuncture method. Dai Rongshui et al^[35]Sixty patients with cervical tinnitus were divided into two groups, one group used acupuncture treatment, and the other group combined with atlantoaxial rotation recovery treatment based on acupuncture. The results showed that the total response rate of the observation group was significantly higher than that of the control group.

5. Conclusion

In ancient times, tinnitus is also known as “chat qiu” and “ear roar”, and the method of acupuncture to treat tinnitus has a long history. In the pre-Qin and Han dynasties, “Lingshu Jue disease” cloud: “tinnitus, anterior ear artery” explained the basic principle of local extraction of tinnitus acupoint. In the Lingshu meridian, the hand sun small intestine meridian, hand Shaoyang sanjiao meridian, foot Shaoyang gallbladder meridian, foot Yangming stomach meridian and foot sun bladder meridian are all closely related to the ear function. Generations of the doctor according to the “meridians, the main treatment and”, “acupoints, the main treatment and” the truth, in the

treatment of tinnitus often to the Yang meridian point and the ear local point. It can be seen that in the treatment of tinnitus, acupuncture takes the near part of the ear, ear palace, listening points and the three jiao meridian, small intestine meridian, gallbladder meridian and other distal acupoints, which matches the distance with the overall treatment of tinnitus.

To sum up, acupuncture combined with traditional Chinese medicine, acupuncture with bloodletting therapy, moxibustion, ear points and other treatment methods, can reduce the clinical pain of tinnitus patients. But different ways also treat tinnitus. Generally speaking, acupuncture combined with TCM can treat liver stagnation and qi stagnation and blood stasis block, and kidney essence deficiency and other deficiency syndrome; acupuncture combined with blood discharge and internal obstruction, and acupuncture is mostly used in tinnitus patients; the author in clinical observation found that tinnitus is mostly caused by the patients' uncontrolled emotions and intense anxiety, so that acupuncture and bleeding and distal acupuncture on Xinshu, liver yu, Yifeng and other points, in the whole, and thus resulted in the effective effect.

In recent years, acupuncture combined with traditional Chinese medicine, bloodletting therapy, moxibustion, acupuncture injection and other methods have continuously enriched the connotation of comprehensive therapy of tinnitus, and the clinical application is gradually extensive, but there are still the following shortcomings: (1) the external treatment methods of acupuncture and bloodletting therapy have not been unified, the acupuncture area, acupuncture depth, bleeding and other problems have not reached the quantitative standard, mostly based on the personal clinical experience, randomness; (2) the research on the mechanism of action is less, mostly for the clinical observation studies; (3) in clinical research, the sample size included is too small. Therefore, acupuncture combined Chinese medicine, bloodletting therapy, moxibustion, acupuncture injection therapy still need to further improve the diagnosis and treatment method, in the future clinical research, should increase the mechanism of tinnitus this disease research, to find the best treatment, to guide the clinical, in improving the curative effect while reducing recurrence, looking forward to these comprehensive therapy in the future to better reduce the pain of tinnitus patients, improve the quality of life of patients.

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