

Acupuncture strategies for long COVID: focusing on anosmia, ageusia and insomnia

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Abstract

Among lots of long Covid symptoms, we focus upon 3 key problems including loss of smell, loss of taste, sleep disturbance which are very potential upon acupuncture. By integration of acupuncture into current health care, patients suffered from long Covid can be expected to have a better life in the future.

Keywords: COVID, long COVID, post-COVID-19, acupuncture, ageusia, anosmia, sequelae

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Introduction

Covid-19 has caused a global crisis. In total there's 6.4 millions of death.¹ By the development of new medicine including Remdesvir,² Paxlovid,³ Monupiravir,⁴ and a novel new TCM formulae known as NRICM101⁵ the outcome of COVID-19 improved, but its sequela could persist. In 2021, Birch et al. firstly discussed deeply about "potential role of acupuncture and Chinese herbal medicine in the treatment of Covid-19 and subsequent health problems".⁶

Long covid

Lots of problems could persist, return, or burst out new conditions from 2 weeks to several months in general after acute Covid-19 and designed as long Covid (Post Covid-19).⁷ From more commonly seen post-viral complaints such as fatigue, brain fog and depression to more immediately life-threatening symptoms such as prolonged respiratory problems, blood clots and new cardiac conditions, which appear to be characteristic to the COVID-19 virus infection.⁶

Within lots of long Covid symptoms, we will focus upon the following 3 key problems including loss of smell, loss of taste, insomnia, which are very potential upon acupuncture treatment. Among 958 patients with confirmed SARS-CoV-2 infection in 2020 were observed by Augustin et al. for long-term symptoms. They observed 442 patients over four months after symptom onset. Four months post SARS-CoV-2 infection, 12.4% with anosmia, 11.1% with ageusia.⁸ Hence we will focus on anosmia firstly.

Besides inflammatory in the brainstem,⁹ neuromuscular junctions may contribute to cognitive impairment ("brain fog"), headache, insomnia and other neurologic symptoms.¹⁰ In 2022, Schilling stated that about one third report sleep disturbances 3 months after COVID-19.¹¹ Hence, sleep disturbance will also be discussed.

Anosmia

Anosmia means the loss of smell function. Ageusia means the loss of taste function. In theory, the Large intestine meridian, which distributed from the index fingertip up to elbow, up to face, then crossing opposite nose which could be considered first. The acupoint Hegu (L14) is a key. As it says: "face and oral are concentrated with Hegu point." Previously, Michael et al.¹² reported the successful treatment of a case of anosmia with acupuncture. As observed, she has been managed conventionally for two years but no sign of improvement. Finally, the patient regained the sense of smell

following one session of acupuncture therapy.¹² In addition, there is another related case report with ageusia and dysosmia published before.¹³ Therefore, acupuncture treatment for Long COVID related ageusia and anosmia seems to be a hopeful option.

When human being lives longer, living better is the next step. If the elder residents in care home with severe symptoms, are impacted into poorer outcomes from the Long COVID; for preventive aspects, there could be TCM physical resilience from Tai-Qi, Qi-Kong,¹⁴ Baduanjin,¹⁵ combined with distant healthcare,¹⁶ with the help of artificial intelligence, which is still a lot of potential to explore, under modest monitoring, big data accumulating, combined with psychological profession counseling for soothing the social separation impacts;¹⁷ we could also prescribe musical/fragrance therapy in accordance with the five elements sound/olfactory therapy¹⁸ which is suitable for aiding the helpless and neuron-injured patients with lost sensations.¹⁹

Besides, Quchi (LI11) is also important. The acupoint of large intestine Yingxiang (LI20) is also a considerable choice, due to its anatomic location around the nose, which is believed to have a regional effect upon nasal disorder according to the acupuncture theory. Another meridian connecting nose and oral is the stomach meridian. The stomach meridian originates from the nose...passes into the upper teeth... downward to the stomach, which is the key for the regulation of GI function and related area as nose.

Ageusia

Ageusia means the loss of taste, which bothers the life quality very much. In theory, stomach meridian which "...penetrates the maxilla and teeth, turns laterally, exits the maxilla and skirts around the mouth",²⁰ distributed around mouth could be considered firstly. The point Zusanli (ST36) is a key to regulate the energy of stomach meridian. In Chinese philosophy, oral cavity is regarded as the orifice of spleen visceral (couple with stomach). Hence, ST36 is believed to be able to treat GI as well as mouth disorders such as ageusia. Besides, Yamaguchi et al. has shown that "acupuncture may regulate the immune system and promote the activities of humoral and cellular immunity as well as NK cell activity".²¹

Sleep disturbance

To realize the nature and extent of persistent neuropsychiatric symptoms after COVID-19, Badenoch et al.²² systematically determined the prevalence of neuropsychiatric symptoms in survivors

of COVID-19. It was reported that the most prevalent neuropsychiatric symptom was sleep disturbance with prevalence 27.4% (21.4–34.4%).²² When treating neuropathic disturbances are concerned, acupuncture treatment for Long COVID is immense: simple, at hand, and effective. In TCM theory, while suffered from some external contracted evils, the bladder meridian used to play a role to defence, which connects with the heart viceral; which could lead to a latent sleep disturbance in the late phase of COVID-19.

A branch of the heart meridian “separates from the heart connectors, traveling upward along the side of the esophagus to link with the eye connectors (the structures connecting to the brain which could be chosen for treating deases of the heart, spirit, and chest.) For depression, fright palpitation, fearful throbbing, insomnia, Shenmen(Ht7) could be taken into consideration”.²⁰ In addition, Taichung (Liv3), for sleep distabance is also an effective acupoint for soothing soul, when normally asleep concealed into visceral liver.

Conclusion

By the integration of acupuncture into current medicine care, patients suffered from long Covid could have a better life in the future. Based upon the clinical observation and meridian theory, management of acupoints especially on Hegu(LI3), Yingxiang(LI20), Zusanli (ST36), Shenmen(Ht7), and Taichung(Liv9) could bring a hope for people suffering from ageusia, anosmia, and sleep disturbance. However, current clinical evidence limited and further randomized controlled trials are necessary.

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Conflicts of interest

The authors declare no conflicts of interest in preparing this article.

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