Clinical Observation

The Thoughts and Methods for Clinical Research on Acupuncture Treatment of Chronic Fatigue Syndrome

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The general situation of chronic fatigue syndrome (CFS) and the criteria for its diagnosis are discussed, and it is put forward that making qi and blood of the zang-fu organs balanced is the key to acupuncture treatment of the disease. Such aspects as case selection, point selection and therapeutic assessment are also discussed in the present paper.

Denominated by American Center for Disease Control, chronic fatigue syndrome (CFS) refers to a series of symptoms, manifested mainly by chronic or repetitive extreme fatigue for over half a year, with reduced activity by more than a half as compared to the normal condition, and it can not be alleviated by bed rest. It may be accompanied by such symptoms as sore throat, myalgia and arthralgia, lymphadenectomy, insomnia, and with the psychoneural symptoms of headache, upset, anxiety and mental depression.

The Situation and Criteria for Diagnosis

According to an inquisition made in U.S.A., in recent years the incidence of CFS has increased from 1775 to 6321 per hundred thousand people. An American family doctor working in a district may treat 5-6 patients complaining of fatigue each week. In Japan about ten thousand people suddenly died of over-fatigue each year. An investigation made in Australia has shown that the incidence of CFS is 37.1 per hundred thousand people, and 40% of the patients can not normally work and study. The author has made an investigation in 1013 people aged from 20 to 50 years during the period from March to May of 2005, and found that 57.7% of them showed fatigue manifestations, and 6.3% had CFS. Usually, young women amount to a large percentage, and those with economical success have higher incidence. Studies have shown that the occurrence of CFS is related to mental and physical stress, insufficient sleep, unreasonable food intake, excessive smoking and drinking, psychic irritation and psychological stress, and poor environment, such as mugginess, contamination, noise, and crowdedness. Therefore, American Center for Disease Control has anticipated that CFS will become a major problem affecting human health in the 21st century. Up to now, the pathogenesis is not clear, and with no satisfactory therapy for its treatment in modern medicine. However, based on macroscopical TCM differentiation, acupuncture can be adopted for regulating the functions of the whole body, which may show a favorable prospect for treating CFS.

Among several kinds of diagnostic criteria, that established in 1987 and revised in 1994 by American Center for Disease Control was the earliest one, and it has been generally acknowledged in the world.1 The criteria is described as follows: 1) Sustained and repetitive chronic fatigue lasting for 6 months or more with the cause unknown, and it is a recent problem with clear onset duration. It is not due to sustained physical labor, which can not be alleviated by sufficient rest. There is a considerable decline in the ability of working, accepting education, self-care of daily life, and in the social activities. And all the other diseases that may cause similar symptoms are excluded. 2) At least four of the 8 accompanying
symptoms are shown: a) decline in memory or mind concentration; b) sore throat; c) cervical or subaxillary lymphadenectasis with tenderness; d) myalgia; e) multiple arthralgia with no swelling; f) headache; g) fatigue that can not be alleviated by sleep; h) over 24-hour lasting fatigue after physical exertion.

**Thoughts for TCM Differentiation**

Fatigue is a kind of dysfunction of the human body, which is manifested by being tired of physical or intellectual activities with difficulty in dealing with them. Based on the symptoms, it is categorized in ancient books as sluggish, weakness of the limbs, myasthenia, aching pain of the limbs, and general debility.

The author holds that CFS is not only a syndrome of deficiency, but also that of excess in certain aspects. It is a disorder with dysfunction of qi and blood, which is related to the consumptive disease or mental depression. Its pathogenesis is relevant to internal injure by excessive emotion, overstrain by excessive fatigue, over-thinking and anxiety, and indulgence in sexual activities, improper food intake, and inherent deficiency. The heart and spleen are mainly affected, and the disorder is originated from the liver with qi deficiency and blood stagnation. As stated in Plain Questions  · On Tiaojinglun (素问· 经络) that disharmony between qi and blood may cause various kinds of diseases. Deficiency of qi means deficiency of the primordial qi, leading to the functional decline of impelling, warming, reinforcing, defending and gasification. Deficiency of the primordial qi results in deficiency of qi in the zang-fu organs. Deficiency of the spleen-qi causes lassitude and weakness, and aching pain and uncomfortableness. Deficiency of the heart-qi causes listlessness and asthenia, palpitation and insomnia, which is aggravated by laboring. Deficiency of the kidney-qi causes low spirit and drowsiness. Deficiency of the lung-qi causes short breath and easiness of getting cold. Deficiency of the liver-qi causes mental depression with low spirit, thought slowness, and dreamfulness and timorousness. Blood stagnation means embarrassment of blood circulation, obstruction of blood in the meridians and/or organs. Obstruction of the meridians may induce dysfunction of the microcirculation, resulting in chronic ischemia and hypoxia, causing a declined and abnormal functioning of various systems. Obstructed in the meridians and the zang-fu organs, qi and blood are unable to circulate smoothly, resulting in fatigue, myalgia and joint pains. In a word, qi deficiency and blood stasis result in deficiency of the zang-fu organs, imbalance of qi and blood, and imbalance of yin and yang, leading to occurrence of CFS. As stated in Leizhengzhicai  · melancholia (类证治裁 · 郁症), mental depression due to internal injury by seven modes of emotions initially affects qi, secondarily involves blood, and at last causes the disorder. By way of regulating the zang-fu organs, qi and blood, modulating internal mechanisms of the body, such as adjusting humoral levels, activating auto-regulative functions of the neural and humoral systems to promote the functions of the tissues and organs of the body to make them normalized and balanced, TCM can treat CFS without obvious side effects.

**Thoughts and Methods for Acupuncture Treatment of CFS**

There has been clinical and experimental researches on acupuncture for treating CFS, but the quality varies. It is of great importance to verify the research reliability by applying the basic principles and methods used in modern scientific research.

1. Case selection:

The cases selected should be strictly in accordance with the above-mentioned criteria for diagnosis of CFS. As fatigue is a non-specific symptom frequently encountered in many kinds of diseases, the following conditions of chronic fatigue should be excluded before making the diagnosis of CFS: 1) The chronic fatigue induced by some other primary diseases, such as hypothyroidism, insomnia and paratherapeutic fatigue; 2) the chronic fatigue induced by such intractable diseases as hepatitis B or C virus infection;
3) the cases diagnosed in the past or currently as having emotional disorder like mental depression or bi-phased emotional illness, schizophrenia, paranoia, dementia, anorexia nervosa and bulimia nervosa; 4) those with smoking addiction and alcoholic for more than 2 years; 5) those with severe obesity. The diagnosis for CFS should be made by objective and subjective evaluations, based on a comprehensive scoring system for physiological, psychological, physical and mental status.

2. Point selection:
Aiming at the pathogenesis of CFS, the five back shu points, Baihui (GV 20), Yintang (EX 1), Shanzhong (CV 17), Qihai (CV 6), Xuehai (SP 10), Geshu (BL 17), Guanyuan (CV 4), Zusanli (ST 36) and Sanyinjiao (SP 6) may be selected as the main points, with other points added based on differentiation of the symptoms and signs. The five back shu points are used to regulate qi and blood of the zang-fu organs so as to eliminate fatigue. Baihui (GV 20) and Yintang (EX 1) are used to induce resuscitation to modulate the functions of the heart and brain. Shanzhong (CV 17) and Qihai (CV 6) functions to relieve the depressed qi in the chest, restore the primordial qi, and regulate vital energy of the whole body. Xuehai (SP 10) and Geshu (BL 17) can remove blood stasis and regulate the ying and blood system. Guanyuan (CV 4), Zusanli (ST 36) and Sanyinjiao (SP 6) functions to invigorate qi, compensate deficiency, nourish yin, and tonify qi and blood of the whole body. Clinically, the points should be better selected simply and comprehensively, for instance, one point each selected from the upper, middle and lower parts of the body, with another one used according to syndrome differentiation.

3. Criteria for evaluation of the therapeutic effects:
There are mainly two kinds of criteria for evaluating the therapeutic effects on CFS. 1) The first one: markedly effective: the main and the accompanying symptoms disappeared or reduced by over 2/3; improved: the main and accompanying symptoms reduced by over 1/3; failed: the main and the accompanying symptoms reduced by < 1/3 or with no improvement. 2) The second one: cured: complete disappearance of the symptoms; markedly effective: basic disappearance of the symptoms; improved: obvious improvement of the symptoms; failed: no obvious improvement was found in clinical symptoms. In terms of clinical research on acupuncture for treating CFS, scoring made by self-evaluation for CFS with comparison of the scores obtained before and after the treatment is the proper way to estimate the therapeutic effects.

Nowadays, there is a tendency from microcosmic investigation to integrated modulation in researches made in modern medicine. In this aspect, acupuncture may show its specific predominance for functional regulation of the whole body. And by using the modern scientific principle and methodology, the mechanism of acupuncture for CFS will be convincingly elaborated.

References

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