18 Effect of Acupuncture on Drug Addiction

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Summary This chapter summarizes the advancement of clinical acupuncture for drug addiction and the basic research on its mechanisms. The applications of auriculo-acupuncture, body acupuncture, electroacupuncture (EA), acupuncture with Han’s acupoint nerve stimulator (HANS), and combination therapy will be briefly introduced with comments on their efficacy. Although, the mechanisms underlying the acupuncture treatment are not well understood, evidence has shown that acupuncture can regulate the function of endogenous opioids and other neurotransmitter systems, and can modulate immunity, endocrinology, and psychology, to achieve the therapeutic effect on drug addiction.

Keywords acupuncture, drug addiction, β-endorphin, hypothalamus-pituitary-adrenal axis, withdrawal syndrome

18.1 Introduction

Drug abuse and addiction develops into a critical social and medical problem. Various drugs, such as cocaine, heroin, ice (the popular name for methamphetamine hydrochloride, a deadly addictive stimulant drug), and dancing outreach, can induce severe addiction, serious withdrawal syndromes, and have extremely high recurrence rate after quitting. Both psychological problems and somatic disorders may appear in opioid-dependent patients, such as myoendocarditis, hepatitis, stomach ulcer, duodenal ulcer, constipation, convulsion, paralysis agitans, peripheral neuritis, and even have a close relationship with AIDS. In addition, in pregnant women, drugs may also have an impact on their unborn children.

Acupuncture treatment for opioid dependence was employed in 1972 by a Hong Kong surgeon, Wen (Wen and Cheung 1973). Inspired by the principle of acupuncture anesthesia, he tried to use acupuncture for treating drug users. Subsequently, some experimental researches on acupuncture treatment for drug addiction were carried out in the USA, and the technique has been widely employed all over the world. Nowadays, many doctors and researchers in different countries
use acupuncture to treat drug addiction. Various acupoints are chosen based on different symptoms of the patients, such as Shenting (GV-24), Baihui (GV-20), and Fengchi (GB-20) for head symptoms; Dazhui (GV-14), Zhiyang (GV-9), and Huatuojiaji (EX-B5) for somatic symptoms; Neiguan (PC-6), Shenmen (HT-7), Hegu (LI-4), Taichong (LR-3), Zusanli (ST-36), Sanyinjiao (SP-6), and related Back-Shu acupoints for limbs symptoms.

18.2 Clinical Application of Acupuncture for Drug Addiction

Auricular-acupoints were first adopted in acupuncture therapy for drug addiction, which became the most popular technique in terms of clinical application. The common auricular-acupoints include Ear-Lung, Sympathetic Nerve, Shenmen, Liver, Kidney, Heart, Endocrine, Stomach, Attack point, and Frustration point (Cui 1996). The concrete body acupoints include Baihui (GV-20), Yintang (Ex-HN3), Hegu (LI-4), Zhusanli (ST-6), Yinxian (LI-20), Tianshu (ST-25), Shenshu (BL-23), Dachangshu (BL-25), Shenmen (HT-7), Zhubing (KI-9), Fuliu (KI-7), Weizhong (BL-40), Huantiao (GB-30), Neiguan (PC-6), Sanyinjiao (SP-6), Tongli (HT-5), Lieque (LU-7), Taichong (LR-3), Heyang (BL-54), Feishu (BL-13), Xinshu (BL-15), Fengchi (GB-20), and Qihai (CV-6).

18.2.1 Auriculo-acupuncture

Dr. Wen, a surgeon in Hong Kong, studied acupuncture anesthesia in China in 1972, and adopted bilateral auricular-acupoints to treat drug addiction in Tung Wah Group Hospital. He and his colleague punctured the auricular-acupoint, Ear-Lung, 2 – 3 times per day for 3 – 5 days during acute phase, followed by subsequent daily treatment for another 4 – 5 days. In the 40 cases treated, 39 quitted the drug completely (Wen and Cheung 1973). Furthermore, when electroacupuncture (EA) was employed, the effect was observed to be even better. Subsequently, an American psychiatrist, Michael O. Smith, studied acupuncture treatment for drug addiction for 20 years, supported by the National Drug Abstain Committee, where people and doctors learnt the procedures of acupuncture treatment. Since the 1970s, auriculo-acupuncture for drug addiction has been used in the Lincoln Hospital, New York. The clinical data confirmed that auriculo-acupuncture could alleviate the withdrawal symptoms and reduce craving; furthermore, the drug users were willing to undergo treatments (Smith and Khan 1988; Smith, 1992).

The Ear-Lung, Shen, Shenmen, and Pizhixia acupoints on both the ears have been associated with hypnosis therapy. In an earlier study, 20 cases were followed-up for 2 years. The withdrawal rate reached 80% in the first 3 months, and 70%,