

Current Situation and Thinking of Chinese Medicine Aromatherapy

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Abstract. For thousands of years, traditional Chinese medicine uses the aromatic composition of natural aromatic plants, through massage, smell of incense and for external application produces an anti-disease and health care function on body. Traditional Chinese medicine aromatherapy can be used to refresh the brain, dispel evil spirits, expel mosquitoes, and have the function of invigorating, anti-wrinkle skin and skin care. In addition, there are a lot of applications for trauma and beauty. This article reviews the research achievements of aromatherapy in action mechanism and action pathway, and provides a reference for further study, development and application of aromatherapy.

Introduction

Chinese Medicine Aromatherapy is an ancient method, it make the traditional Chinese medicine with aromatic smell into appropriate the form of a drug. By acting on the systemic or local, to achieve the aim of preventing and treating diseases. Traditional Chinese medicine began to use aromatherapy for health care in ancient times^[1]. In the pre Qin literature, “The Classic of the Great Wilderness” recorded more than 100 kinds of traditional Chinese medicine, including aromatic drugs such as angelica, cassia twig, wild ginger etc. In Ming dynasty, the famous medical home li shizhen lists a number of herbal plants that are active in fitness and disease in “Compendium of materia medica”. A total of 365 flavor medicines are collected in “Shennong bencaojing”, which contains about 10% of the aromatic drugs. In the tang dynasty, many new aromatic drugs were added in “Xin xiucaoben”, and its medicinal properties and functions were detailed, such as borneol, benzoin and styrax. But in recent years, the research and comprehensive utilization of aromatherapy has been slow, and most of the applications have been focused on beauty, which has been neglected in the treatment of diseases. Moreover, aromatherapy is mainly based on folk or personal experience, and lacks the professional treatment that can be recognized, unified and systematic by the national medical establishment. Therefore, the further research, development and application of aromatherapy will help the modernization of traditional Chinese medicine.

The Aromatic Plant Commonly Used in Aromatherapy

Table 1. The aromatic plant commonly used in aromatherapy.

Name	Familie	Medicine part	Major functions
Clove	Oleaceae	whole plant	Stomach pain and distention,
lemon	Rutaceae	fruit pericarp, leaf	removing heat-phlegm
eaglewood	Thymelaeaceae	Flower buds	Counterflow panting
mentha haplocalyx	Labiatae	leaves	swelling and pain in throat
rhizoma cyperi	sedge	leaves	menopausal syndrome
agastache rugosus	Labiatae	leaves, branches	anti-bacterial chronic bronchitis
cassia twig	Lauraceae	leaves	Arthralgia anemofrigid cold
ginger	Zingiberaceae	rhizome	relieve fatigue and back pain

The effect of drugs. Aromatherapy uses aromatic drugs, and aromatic drugs themselves contain effective ingredients that act on the body. By using aromatic drugs, can produce a positive moderating effect on the human nervous system and the endocrine system, thus to prevent and cure disease. Such as cinnamon containing cinnamon oil, has a good effect of spasmolysis analgesic; Ginger containing gingerol, has the effects of anti-oxidation, anti-apoptotic and anti-inflammatory; Asarum contains methyl eugenol, has a strong effect of central depressant and the effects of calm, analgesia, anaesthesia is particularly evident^[2]. The ephedra and peppermint can stimulate the secretion of sweat, expand peripheral blood vessels, enhance the surface circulation, widely used in cold table card, they are more used in the aspect of wind cold syndrome. Guizhi, windproof, solo, qinwu has the effects of antispasmolysis or the antipyretic analgesic, has a good effect on the treatment of arthritis caused by Qi and blood stasis. Ginger, nutmeg has the effect of warm astringent and digestion can be used for the treatment of heart pain, vomiting and indigestion disappear. Atractylodes rhizome, cortex acanthopanax radice, alisma orientalis and ginseng can lower blood sugar; can be used for the treatment of diabetes. Woody, amomum and cinnamon can eliminate the gastrointestinal pneumatosis, alleviate stomach cramps, has obvious curative effect on the gasteremphraxis, stomach stagnation and gripe^[3]. Clinical pharmacological analysis also found that aromatic drugs have the function of killing viruses, bacteria and antagonism.

The effect of the fragrant smell from aromatic drugs. Aromatic drugs can “regulating qi and blood, removing pathogenic factors”. It has the function of removing foul miasma and refreshing fragrance. The volatile oil contained in aromatic drugs release slowly, spread the entire body by lung respiration after contact with human nasal olfactory cells. By the smell of the fragrance, it can make people refreshed, stimulate appetite, and make the mood cheerful and enron to sleep at the same time. The volatile oils contained in aromatic drugs tend to produce a large amount of special fragrance^[4] Since the body's olfactory centers and memory centers are located in the same parts of the brain, when we inhale the aroma, it will triggers the positive emotions stored in the emotional brain subconsciously. When these contain strong aroma and

diffusion of volatile oil molecules activated in the air, feeling produced by the olfactory organs of olfactory cells, showing a different signaling pathway compared to other senses in the central, not directly through the hypothalamus, but projecting directly into the cerebral cortex, and then causing changes in all aspects of the body^[5]. Modern studies have also reported that the smoke emanates from the fumigation of rhizoma atractylodis, folium artemisiae argy and other Chinese herbal medicine have strong bactericidal, is a good air and environmental disinfection supplies. In addition, it has certain clearance to the bacteria and natural bacteria in the air^[6]. More common, such as smell, pillow, etc, have the following advantages: The smell is natural and fresh, aromatic and pleasant, the effect is long, the smell is fragrant and unstimulating, the patient is easy to accept, suitable for carrying or placing in the car, bedroom and other more confined space use. Long-term use can also relieve the emotion, regulate the immune system, enhance the immune ability, and improve the ability of the body to fight disease.

Table 2. Five ways of inhalation of common aromatherapy.

Inhalation route	Method of operation
Direct inhalation	Dip the essential oil on a handkerchief or tissue paper through deep breaths to inhale essential oils aromatic molecules.
Steam inhalation	Add the essential oil to the hot water, and the scent of the essential oil will be exhaled by the water vapor.
Incense inhalation	Add the essential oil to the incense table or lamp to heat it, so the essential oil aromatic molecules are scattered in the air that can be inhaled.
Spray inhalation	Spray the essential oil into distilled water to make a spray, then spray it into the air or spray it directly into the person, inhaling it.
Bath inhalation	Add the essential oil to the hot bath water, and the aromatic molecules are in the air above the tub with water vapor, and the person could inhale it when showing.

The effect of the aromatic drugs by penetrates the skin. There is the theory of traditional Chinese medicine transdermal absorption in ancient China, the qing dynasty “Theory of source of medical care” say that “with plaster, occlusion of the gas.....It is more powerful than taking medicine, and this is the best way to do so”. This passage clearly illustrates the mechanism of transdermal absorption and has been confirmed by the experiment of modern medicine^[7]. Most of the application of TCM permeable absorbent is aromatic medicine, such as mint, cinnamon, ice sheet, turpentine, cloves, radix paeoniae, angelica, camphor, and galangal and so on. Modern pharmacology has proved that aromatic drugs have the function of promoting permeation, which can increase the transdermal utilization of the drug. For example, the use of essential oils extracted from aromatic drugs, the aroma of essential oil diffused into the air will be absorbed by the patient at the same time as the aromatic essential oils through the absorption

of skin to play the role of treatment. Fragrant dressing and wear incense method, is also concerned with the transdermal absorption of drugs. The penetration of drugs through the role of acupoints, meridians to disease, it can achieve the function of blood circulation and silting, dephoresis, analgesia and dryness^[8].

Modern Research of Traditional Chinese Medicine Aromatherapy

Improving mood. Aromatherapy has accumulated a lot of valuable experience and has many unique features in the research and application of emotional conditioning. Wang Chenxia^[9] used auricular point pressing combined with aromatic therapy to relieve the stress reaction in patients with colorectal cancer surgery. The results showed that the anxiety of patients with colorectal cancer surgery can be effectively alleviated, and the blood pressure and heart rate can be stabilized. Dong Ci^[10] using RevMan 5.3 software for Meta analysis of 508 patients, the results showed that aromatherapy can significantly improve the sleep quality of insomnia associated with somatic diseases. All these suggest that aromatherapy may improve mood. In addition, there are a lot of researches related to essential oil; Lei Longming^[11] observed the effect of peppermint essential oil massage on 200 cases of social stress sub health depression. The results showed that peppermint essential oil massage has an ideal intervention effect on the patients with social stress, sub health and depression. Kong Yingying^[12] tested the effect of Rome Chamomile essential oil treatment for two weeks on depression like behavior in rats with depression, the results indicated that there was a good therapeutic effect. In conclusion, different kinds of essential oils have different functions, which can alleviate or cure different diseases.

Analgesic and anti-inflammatory. Pain is usually caused by a harmful stimulus that causes tissue damage. Chronic severe pain can be an unbearable torment to the body, so analgesia is an important task for medical workers. Zhi-wang wang et al^[13] comparing three kinds of angelica root essential oil extraction technology, results show that the three kinds of oil extraction process has obvious analgesic anti-inflammatory effects, and under the same dose the effects of analgesic anti-inflammatory was no significant difference. Zheng Jibiao et al studied the mechanism of analgesic and anti-inflammatory effects of wild chrysanthemum supercritical carbon dioxide extract. The results showed that the supercritical carbon dioxide extract of wild chrysanthemum had significant analgesic anti-inflammatory effect^[14]. He Teng in non-drug labor analgesia research design such as alleviating labor pain or enhance labor pain tolerance method, the results show that the aromatic analgesic therapy can be on the basis of maintaining maternal and child safety, ease pain in childbirth, promote natural delivery^[15]. Many scholars abroad have applied aromatherapy to pain, anxiety, depression and other diseases, and achieved good results^[16-17]. Studies have shown that aromatherapy essential oil can regulate the cellular function of the uterus by regulating the levels of TXB2 and 6-K-PGF1a in serum, increasing the content of 6-K-PGF1a in plasma and decreasing the content of TXB2. It has a good analgesic effect on dysmenorrhea model induced by oxytocin, and its mechanism may be related to the comprehensive regulation of neuroendocrine hormones^[18]. Aromatherapy is easy to be accepted and has high security, unlike morphine, pethidine and other drugs, they are addictive at the same time of pain relief, and this shows that aromatherapy has a good future.

Improve hypertension. Li Jiaxia investigated the effect of inhaled lavender essential oil on blood pressure in hypertensive patients. The results showed that three concentrations of

lavender essential oil all can lower blood pressure significantly^[19]. Shen Guiqin discussed the effectiveness of aromatherapy and scraping for people with high blood pressure, and daily use of aromatic pillow to sleep. The results show that it can slow down the evolution of hypertensive patients and control the incidence of hypertension to some extent^[20]. The treatment of hypertension is a long process; patients need to insist on taking antihypertensive drugs every day, control of their daily diet, regular exercise and rest. Therefore, the choice of antihypertensive combined with calm, anti depression aromatic essential oils can better improve patient compliance.

The function of aromatherapy, far more than the above several. Research shows that using essential oil can stimulate the body's immune system and have some effect on AIDS, and it can also be effective for skin diseases such as eczema. Other studies have found that lavender, wild celery, orange peel and other plant essential oil for the treatment of cancer has good effect. It has advantages such as multi-target, low adverse reaction, low drug resistance and improving immunity of the body. A growing number of experts believe that aromatherapy, very suitable for seriously ill or dying patients. It can reduce anxiety and depression in patients, reduce the pain that other treatments can bring, and help patients to relax and improve the quality of their lives.

Summary

Our country has always had such a custom that Chinese herbal medicine is used to bathe or soak feet and burn fragrant plants to clean air or remove evil and mosquitoes. Now there are many foot massage shop in cities, and the beauty industry has also seen the use of aromatic essential oils. Thus, the use of aromatic herbs has been greatly developed. Aromatherapy can be used not only as a drug, but also by aroma. Aromatic molecules can not only stimulate the immunity of human body, but also can be applied directly to the affected area as an external medicine, which can cure or alleviate human diseases. Essential oil extracted from aromatic drugs with high permeability, fast metabolism, low toxicity, etc, and easy through the blood-brain barrier to achieve therapeutic purpose, so it is deeply loved by everyone.

The research and application of aromatherapy have been slow and not received enough attention, still more applied in the area of beauty care, and lack of clinical data to treat diseases as medicine. Most of the aromatic drugs are mainly decoction in clinical use, while aromatic drugs contain volatile oil, which can damage the effective ingredients and affect the curative effect. Some volatile aromatic Chinese medicine contains very low volatile oil content, and it is easy to be oxidized and decomposed. In production, the extraction rate is low. The volatile oil is also difficult to retain in the medicine, which is often volatilize because of heat drying, or dissipate during stored procedure. In addition, the effects of aromatic drugs are also affected by the production of the area, season and content.

The decoction way of traditional Chinese medicine has not been suitable to the fast pace of modern society needs, and improvement of dosage forms such as pills, oral liquid, tablet, etc are not ideal, essential oil extracted from aromatic drugs may be a beneficial supplement. If the essential oil is directly applied to specific acupuncture points, may have better efficacy. And further exploration can be made to expand the range of indications. All the signs indicate that the essential oil extracted from aromatic drugs in such aspects as anti-cancer, resistance to disease of heart head blood-vessel has certain advantages. We should strengthen relevant

research and make clear the application scope, drug concentration and dosage of each aromatic essential oil as soon as possible.

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