Hot compress dredges the meridians and collaterals and avoids adhesive contact with the skin

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ABSTRACT. With the development of society, people pay more and more attention to great health, health preservation and traditional Chinese medicine recuperation. As the pace of society accelerates, many new diseases and health problems appear due to the increasing busyness of people and the excessive pressure. For example, the back muscle group fasciitis that often appears because of long-term desk work and invasion by wind cold and damp evil causes, it belongs to the chest back fasciitis muscle injury and muscle adhesion degeneration that form a kind of nerve stimulation pain. Pathologically speaking, it belongs to chronic muscle injury, and its treatment is more complex. There is no so-called magic drug or once-and-for - all surgery. It requires traditional Chinese medicine hot compresses to dredge channels and collaterals, cupping, acupuncture and specific back muscle group training to restore health. There are many problems in the use of traditional hot compress and plaster, including the "fever paste" used in the market. For example, the contact allergic dermatitis caused by "plaster" and "fever paste" will bring trouble to many patients. There are also many problems that are not easy to stick and fall off, which always trouble people. This paper is devoted to the study of the problems existing in hot compress products, as well as the corresponding research on hot compress clothing products of traditional Chinese medicine to solve the problems.

KEYWORDS: dredge meridians; Hot compress; Health clothing; TCM

1. Introduction

Traditional Chinese medicine hot compress plays an important role in the treatment of many diseases, especially for shoulder and neck pain, low back pain, leg pain and wet hot compress for the treatment of breast hyperplasia. There are also many female patients in the menstrual period will be accompanied by low back pain, small abdominal pain, most people will choose "heat paste", but the heat paste can not be directly adhered to the skin, adhered to clothing is not firm and easy to damage the fabric structure and other problems. It is difficult to find a convenient and effective "hot compress" in the market for people who need hot compress. Through investigation, it was found that most of the plaster in the existing traditional Chinese medicine museum has been separated from the traditional black plaster, and has become the external ointment of honey, vaseline and other matrix after crushing Chinese herbal medicine. However, the short prescription is also frequent and complex, and the cost is high. It is necessary to go to the museum of traditional Chinese medicine every day when replacing the plaster.

2. Problems existing in the application process of hot compress therapy products of traditional Chinese medicine

There is also a large number of people in the society have allergic reactions to medical viscose products, and even many people have very serious allergic reactions. Contact dermatitis caused by adhesive plaster and some medical tape can cause skin health problems such as pruritus, swelling, erythema, papules and blisters. []Medical Adhesives-Related Skin Injury (MARSI) refers to abnormal skin symptoms such as erythema, abrasion, laceration, or blisters lasting 30 minutes or more after adhesive product removal. The survey of Farris et al. found that the daily incidence of MARSI was $3.4\% \sim 25\%$ [1].

After reading books and arranging further found that in the specific need to dredge the meridian diseases such as rheumatoid arthritis, back myofasciitis, periarthritis of shoulder, simple plaster, plaster combined with hot compress at the same time the effect is better[2][3]. For example, chest and back myofasciitis, traditional Chinese medicine believes that the formation of this disease is closely related to the invasion of evil gases such as wind, cold and dampness, and deficiency of vital qi. External evil invasion, blocked meridians, meridians impassability, not general pain and the formation of the disease; Wang Qingren put forward the theory that blood stasis can form arthralgia syndrome, strain is easy to form blood stasis and block meridians and lead to pain. Therefore, in order to solve such problems, dredging the meridians and collaterals, promoting blood circulation and removing blood stasis is a crucial treatment process. In traditional Chinese medicine, hot compress can promote the absorption of drugs and the relief of pain, so hot compress is essential in the treatment process. However, the so-called hot compress added with traditional Chinese medicine ingredients on the market is just some trace plant extracts added to the fever iron powder bag, not to mention the

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measurement is very small, the packaging barrier can not contact the skin. There is no significant medical effect, and businesses can not make patients really get treatment from it.

3. Results and discussion

This design can temporarily and effectively alleviate the existing problems in the market, such as the inconvenience of hot compress and the lack of good combination of hot compress and traditional Chinese medicine. As people increasingly focus on self-preservation, it is crucial to develop a product that combines the two. The form may not be specific to a particular product, but the idea can be expressed. In this study, it is applied to the design of intimate clothing, and developed according to the needs of different parts and different seasons. Its use scope is broad, the use method is simple, in the Chinese herbal medicine package configuration also needs the Chinese medicine scholar indepth study, the following design to launch a brief introduction.



Fig1 . Warm underwear on the chest and back

This paper mainly introduces its clothing structure and basic principle, and takes two vest underwear as an example to analyze. Figure 1 is a hot compress vest of traditional Chinese medicine of spring and summer style. It is a hot compress product aimed at mammary glands and back muscle group. The main fabric is bamboo charcoal fiber, and the built-in breathable mesh of drug package. The Chinese medicine hot compress pack is divided into two parts, powder pack (non-woven thin pack with Chinese herbal medicine fragments or powder) and fever pack (with iron powder, water, activated carbon, vermiculite, salt).

The Chinese medicine hot compress is designed to fit the human body according to the different parts of the human body and the degree of the hollow protrusion of the muscle. The size and thickness of the Chinese medicine pack are designed according to the different doses of Chinese medicine, which is more unique and targeted. The heating package is wrapped in the outer and inner layer of the traditional Chinese medicine package. After the heating package is unwrapped, it can be bonded with the Chinese herbal medicine package, so as to make the heat be over, so as not to make the skin feel too hot. Hot packs can also promote the absorption of herbal medicines and skin blood circulation through hot compress. Chinese medicine hot compress pack according to different diseases, built-in different herb powder, different hot compress parts of the purse shape is different. Patients can use it at night and during the day

according to their own needs. The addition of powder bag solves the situation that the hot paste on the market can not touch the skin and there is no real medical effect, and also improves the inconvenience of replacing the traditional paste.



Fig2 .Hot vest on back

Figure 2 TCM hot compress vest is qiu dong season for the design of back problems such as back muscle fasciitis vest, on the main fabric has chosen the tussah silk and nylon fiber blended, tussah silk used in the field of bioengineering is broad, but less used in the field of clothing, its unique properties and the structure of the natural in the use of thermal underwear design has a broad market. Because tussah silk has strong warmth preservation, natural ingredients and high protein content than mulberry silk, it has excellent performance in the design of thermal underwear. It can protect the back from cold wind in winter and play a certain auxiliary role in the rehabilitation and aggravation of back myofasciitis. The ventilation network in the vest is distributed in the corresponding position of the back muscles and acupoints, so that patients can carry out effective hot compress physiotherapy when they change the hot compress package. According to the needs of patients, different doses of powder and different fractions of iron powder can be added to the hot compress package to control the duration and general temperature of the hot compress. Subsequent patents and designed products will also further help patients who need hot compresses.

4. Conclusion

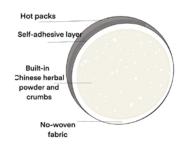


Fig3 .Chinese medicine hot compress pack

In the contemporary social background, especially after the emergence of novel coronavirus epidemic, a series of home protection measures have been carried out at home and abroad. When the epidemic occurs in an emergency, some patients with chronic diseases cannot go to the hospital and clinic to change the Chinese herbal medicine patch they need in time. At this time, a product of hot-compress Chinese herbal medicine pack that can be changed independently is very convenient and urgently needed. It reduces the complex environment and high cost, and brings more convenience and possibility to the treatment of patients. It is not only available for some chronic patients who need TCM hot compress, but also for women during periods of physical pain. Through the specific hot compress clothing to change the specific parts of the Chinese herbal medicine bag, effectively and accurately according to consumer demand for hot compress, so as to relieve pain, dredge the meridians.

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