

EFFECT OF MASSAGE AND MOVING CUP MANIPULATION'S COMBINED THERAPY IN TREATING CLOSED SOFT TISSUE INJURY

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ABSTRACT

Purpose: Combined therapy of massage and moving cup manipulation was applied on martial arts athletes that sustained closed soft tissue injury. Detailed analysis of this therapy revealed that such combined therapy can be an effective treatment for injuries such as closed soft tissue injury.

Methods: Documentary analysis and questionnaire methods were used in this study. A total of 2600 martial arts athletes who sustained closed soft tissue injury between Feb 2013 and Feb 2016 were selected as research subjects. The athletes underwent the proposed combined therapy of massage and moving cup manipulation treatment and the curative effect is analyzed.

Results: Closed soft tissue injury is a common injury sustained during training and competition of martial arts sport. Combined therapy of massage and moving cup manipulation can effectively relieve soft tissue injury and prolong the athletes' career.

Conclusion: Prior to training sessions and competitions, athletes should warm-up to avoid severe injuries and stay healthy.

Keywords: Sport Massage, Moving Cup Manipulation, Martial Arts Athlete, Closed Soft Tissue, Injury.

DOI: 10.19193/0393-6384_2017_3s_201

Received December 30, 2016; Accepted June 20, 2017

Introduction

Injuries have become a part of sports and athletes development. During training and competition of martial arts sport, various degrees of injuries will always occur, which have become a considerable problem and challenge to athletes. Therefore, it is very important to come up with effective treatments for martial arts athletes. During martial arts competition, soft tissue injury (shown in Figure 1) is the most common type of injuries. To treat soft tissue injury, sport's massage is necessary. The early stage of the injury is usually accompanied by red and swollen, heat sensation and pain. At this stage, it is forbidden to undergo massage therapy, this is mainly because massage will accelerate exudation of blood tissue and increase the swelling of the injury site. Therefore, the combined therapy of sport massage and moving cup manipulation is currently a

more common therapy. The author analyzed data collected from 2600 injured martial arts athletes between Feb 2013 and Feb 2016, and the results are reported.

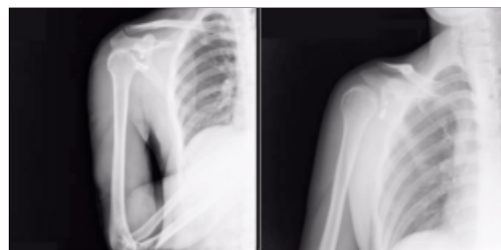


Figure 1: X-ray image of soft tissue injury.

Method

General data

A total of 2600 athletes injured between Feb 2013 to 2016 within city range were selected as

research subjects, of which the general data were analyzed. Among the athletes, 1540 were males and 1060 were female. The youngest athlete was 15 years old, while the oldest was 38 years old. The average height of male athletes was 170.6 cm, while that of female athletes was 156.2 cm. During this study, all selected athletes were subjected to different degrees of acute closed soft tissue injuries for a period less than 48 h. Upon inflecting the injuries, all athletes showed intense and localized pain for several hours. The X-ray examination revealed that no skeletal changes were observed. After undergoing combined treatment, pain eased. In this treatment course, other forms of therapy were deemed unnecessary.

Massage

In the process of performing massage, pointing manipulation and point shifting manipulation were used, which can regulate channels and collaterals and transfer acupoint pain, so as to manipulate the athlete's pain sensation (Figure 2). This methods can reduced athlete's pain or even eliminated it⁽¹⁾.



Figure 2: An athlete undergoing massage method.

Specific massage method should be selected according to injury site. Few minutes of massage using the heel of hand can initiate the closure of injured small blood vessels, which will generate a quick hemostatic effect. Moreover exertion of tissue fluids can be effectively reduced which will lead to a more permanent hemostasis. In addition, some gentle touches should be performed on injured parts using the thumb or heel of hand in case of causing additional unnecessary injuries⁽²⁾. The masseur or masseuse should also ask the injured athlete some questions while doing the massage to distract their attention, to make them have a stable position. This will help in adjusting their energy and blood flow and relieving pain sensation.

Moving cup manipulation

During moving cup manipulation treatment, a layer of thin oil should be applied on injured area as

well as the cupping jar's mouth. After the cup sucks in the skin, one hand shall be placed on the athlete's skin, while the other hand holds the bottom of the cupping jar, moving the cup left and right until congestion and flushing are observed (specific steps are shown in Figure 3).



Figure 3: Moving cup manipulation with essential oil.

After removing the cup, pain feeling will disappears and the athlete's entire body of will be pain-free⁽³⁾. The effect of the treatment upon removing the cup is shown in Figure 4).



Figure 4: Effect Moving cup manipulation treatment.

During moving cup manipulation treatment, the cupping jar's mouth should be too hot, otherwise it will cause scalding. In the case of athletes experiencing nausea, dizziness, chest tightness, shortness of breath, the moving cup manipulation treatment should be immediately stopped. The treatment should also stop if signs of physical damage such as broken skin or blisters are observed⁽⁴⁾.

Results

The proposed combined therapy of sport massage and moving cup manipulation effectively treated 1870 cases, with a treatment success rate of 71.9%. The injuries of treated athletes significantly improved.

During training and competition of martial arts sport, closed soft tissue injuries are common, most of which are chronic injuries⁽⁵⁻⁷⁾. Most injuries of martial arts athletes are mild soft tissue injuries, which can still impact their training session and

unsatisfactory competition results⁽⁸⁾. Therefore, attention should be given to soft tissue injuries. Specific treatment measures should be given according to the degree of the injury and make sure that these injured athletes will recover to pre-injury form. In the early stage of closed soft tissue injury, it is not recommended to conduct massage therapy. However if the person performing the massage treatment is skilled and conduct it using moving cup manipulation method, it can still cure the injury.

Combined therapy of massage and moving cup manipulation treatment can help in reducing the severity of the injury by enhancing metabolism and blood circulation⁽⁹⁾. Therefore, injuries such as closed soft tissue injury should be done as soon as possible. On the other hand, training and competing with injury as well as the with fatigue that accompany the treatment are not recommended. Athletes shall always take part in competition with sufficient warm-up exercise to such injuries. In the process of conducting combined therapy, the person carrying on the treatment should always look for any hands and feet reaction of athlete to the treatment. The amount of pressure applied during massaging should be below the pain threshold of the athlete. During treatment, masseur or masseuse should ask some questions to distract athlete's attention to pain⁽¹⁰⁾.

After finishing the massage and moving cup manipulation, the masseur or masseuse should observe athlete's face. If a relieved emotion and relaxed face are observed, this indicates good energy and blood flow and that muscle pain significantly reduced⁽¹¹⁾.

Upon sustaining closed soft tissue injury, the biological functions of athlete will compromised, which is mainly due to the bioelectricity effect of the body's meridian. Once certain body part undergo changes, the acupoint electric field randomly experiences certain abnormality, which will lead to blockage of acupoint⁽¹²⁾. Therefore functional disorder in the body of injured athlete will start to emerge. During treatment of closed soft tissue injuries with combined therapy of massage and moving cup manipulation, the bio-electricity can be released from the bio-electric filed, which stimulates and significantly increase the output capacity of the bio-field. Therefore the viscosity of local tissues will be reduced and the liquidity of protoplasm will be increased, making a significant increase in enzyme activity and enhance the metabolism in the

injured tissue. This will lead to a series of biological change that ultimately accelerates the rehabilitation process of the athlete⁽¹³⁻¹⁶⁾.

Conclusion

In the early stage of closed soft tissue injuries of martial arts athletes massage therapy only can be first applied. Combined therapy of massage and moving cup manipulation can initiate certain biological effects at treatment site. By adjusting the energy and blood flow, the combined therapy can accelerate blood circulation, balance Yin and Yang, and enhance the metabolism and rehabilitation of injured tissues. The mechanism of function of the proposed combined therapy is via enhancing venous return, accelerating the exchange of organelles materials, and promoting the dilution of mediators in the body. This reliefs the pain symptoms and enhance the exertion of tissue fluidm, so that local swelling and internal tissue pressure can be reduced, nerve stimulation is removed, and finally the curative effect can be realized.

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