



THE IMPLICATIONS, APPLICATIONS AND BENEFACTORS OF MASSAGE

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Abstract

The Science of sports Massage is of interest to many populations including athletes, athletic trainers, coaches, as well as sports physiotherapists. While evidence to support or refute the effects of massage on sports performance is insufficient to make definitive statements, new reports and trends within data help formulate on understanding of sports massage. Sports massage should play an important part in the life of any sportsman or woman whether they are injured or not. Massage has a number of benefits physical, physiological and psychological. Sports massage can help maintain the body in generally better condition, prevent injuries and loss of mobility, cure and restore mobility to injured muscle tissue, boost performance and extend the overall life of your sporting career. Massage has been utilized in the treatment of illness and injury for thousands of years by health care practitioners. Chinese writings dating back to 2500 BC describe the use of this modality for a variety of medical purposes. Massage has been promoted as a treatment of choice for numerous conditions such as musculoskeletal injuries, cancer, stress, relaxation, and pregnancy.

It was concluding that Sports massage should play an important part in the life of any sportsman or woman whether they are injured or not. Massage has a number of benefits both physical, physiological and psychological. Sports massage can help maintain the body in generally better condition, prevent injuries and loss of mobility, cure and restore mobility to injured muscle tissue, boost performance and extend the overall life of your sporting career. Research evidence has generally failed to demonstrate massage significantly contributing to the reduction of pain associated with delayed onset muscle soreness, or significantly enhancing sports performance and recovery, or playing a significant role in the rehabilitation of sports injuries. Design flaws in research have challenged some of the positive outcomes. Additional studies examining the physiological and psychological effects of sports massage are necessary in order to enhance the sports physical therapists' ability to develop and implement clinically significant evidence based programs or treatments.

Key Words: *Massage, Sports Massage, Massage Therapy.*

Introduction

The Science of sports Massage is of interest to many populations including athletes, athletic trainers, coaches, as well as sports physiotherapists. While evidence to support or refute the effects of massage on sports performance is insufficient to make definitive statements, new reports and trends within data help formulate on understanding of sports massage. Sports massage should play an important part in the life of any sportsman or woman whether they are injured or not. Massage has a number of benefits physical, physiological and psychological. Sports massage can help maintain the body in generally better condition, prevent injuries and loss of mobility, cure and restore mobility to injured muscle tissue, boost performance and extend the overall life of your sporting career. Massage has been utilized in the treatment of illness and injury for thousands of years by health care practitioners. Chinese writings dating back to 2500 BC describe the use of this modality for a variety of medical purposes. Massage has been promoted as a treatment of choice for numerous conditions such as musculoskeletal injuries, cancer, stress, relaxation, and pregnancy.

Physical therapists who specialize in sports medicine often utilize massage techniques to aid an athlete's recovery from intense exercise or as a treatment option when performing clinical rehabilitation. Sports massage has been suggested as a means to help prepare an athlete for competition, as a tool to enhance athletic performance, as a treatment approach to help the athlete recover after exercise or competition, and as a manual therapy intervention for sports-related musculoskeletal injuries. While massage is frequently performed by physical therapists (and other healthcare or alternative medicine practitioners) and is popular with athletes and coaches, its actual efficacy is questionable.

The purpose of this paper is to review and present the current literature relating to sports massage and its roles in effecting an athlete's psychological readiness, in enhancing sports performance, in recovery from exercise and competition, and in the treatment of sports-related musculoskeletal injuries. Recommendations are discussed highlighting the need for additional research in sports massage.

Defining "Sports Massage"

Sports massage is the specific application of massage techniques, hydrotherapy protocols, range of motion/flexibility protocol



and strength-training principles utilized to achieve a specific goal when treating an athlete. Notice my use of the phrase, "specific application ... to achieve a specific goal." So, how do you decide what application and goal is appropriate for a particular treatment?

Three Key Principles of Sports Massage

Three specific principles are vital to understanding what type of sports massage to apply to an athlete at any given time. I call these principles the "when, what and why" of sports massage: Timing, Technique and Intent.

Timing refers to when the massage is given: pre-event or post-event; during recovery; during a maintenance period; or when an athlete suffers an injury that requires rehabilitation. Technique refers to what application you utilize, and can include a number of different techniques: effleurage; friction; petrissage; vibration; shaking; compression; broadening strokes; direct pressure; cross-fiber friction; range of motion; and stretching. Intent refers to your reason(s) for treatment: as warm-up; to increase blood flow; stimulate neurological pathways; aid recovery from exertion; increase flexibility; improve strength; or improve posture.

Sports Massage Therapy

Firstly, you do not have to be a sports person to benefit from SMT. This is a common misconception; SMT refers to the deep firmer mobilization techniques used on the tissues. It loosens overused muscles and helps them release waste products. It also benefits people who suffer occupation / RSI problems, as lack of movement can be as damaging as excessive; encouraging muscle shortening, slowing blood-flow and increasing specific areas of tension. SMT is a lot different from the general relaxation techniques that most people associate with massage.

Effects of Massage

Sports massage should play an important part in the life of any sportsman or woman whether they are injured or not. Massage has a number of benefits both physical, physiological and psychological.

Physical Effects of Massage

Pumping - The stroking movements in massage suck fluid through blood vessels and lymph vessels. By increasing the pressure in front of the stroke, a vacuum is created behind. This is especially important in tight or damaged muscle tissue as a tight muscle will squeeze blood out like a sponge, depriving the tissues of vital nutrients and energy to repair.

Increased tissue permeability - Deep massage causes the pores in tissue membranes to open, enabling fluids and nutrients to pass through. This helps remove waste products such as lactic acid and encourage the muscles to take up oxygen and nutrients which help them recover quicker.

Stretching - Massage can stretch tissues that could not be stretched in the usual methods. Bundles of muscle fibers are stretched lengthwise as well as sideways. Massage can also stretch the sheath or fascia that surrounds the muscle, so releasing any tension or pressure build up.

Break down scar tissue - Scar tissue is the result of previous injuries or trauma and can effect muscle, tendons and ligaments. This can lead to inflexible tissues that are prone to injury and pain.

Improve tissue elasticity - Hard training can make tissues hard and inelastic. This is one reason why hard training may not result in improvements. Massage helps reverse this by stretching the tissues.

Opens micro-circulation - Massage does increase blood flow to tissues, but so does exercise. What massage also does is open or dilate the blood vessels and by stretching them this enables nutrients to pass through more easily.

Physiological Effects of Massage

Pain reduction - Tension and waste products in muscles can often cause pain. Massage helps reduce this in many ways including releasing the bodies' endorphins.

Relaxation - Muscles relax through heat generated, circulation and stretching. Mechanoreceptors which sense touch, pressure, tissue length and warmth are stimulated causing a reflex relaxation.



Psychological Effects of Massage

Anxiety reduction - through the effects mentioned above relaxation is induced and so reduces anxiety levels.

Invigorating - if massage is done with brisk movements such as what would be done before an event then this can produce an invigorating feeling.

Benefits of Sports Massage

Sports massage has many of the same benefits as stretching, as it helps increase blood flow to the muscles, stimulate nerve endings and break down scar tissue. It also encourages tissue healing by aiding re-align damaged fibres, which ultimately improves muscular function. It is the quality of rest that is the key to effective training, of which massage can greatly improve the effectiveness. Regular treatment enables more training at a higher level and with greater safety. Most sports require good flexibility; however stretching exercises alone aren't always fully effective due to joint range restriction. E.G, the elbow joint cannot extend beyond 180 degrees, which doesn't fully stretch all the biceps muscle fibres. Where a problem affects only a small part of a muscle, the majority of healthy fibres can stretch sufficiently to accommodate the full range without having any effect on the damaged area. SMT techniques can stretch specific areas of tissue, irrespective of range of movement.

The greatest benefits from sports massage, like stretching, come from doing it regularly, even when you feel fine. Bearing in mind costs, to get any real benefits you should go at least every 4-6 weeks, anything less is like starting from scratch. Certainly, both stretching and massage help you when you have an acute problem. But a good way to avoid an injury at all is to be consistent in your flexibility program, which should include sports massage, as is the most powerful tool for improving muscle elasticity.

The benefits of Massage Therapy

There are tremendous benefits to be achieved through regular massage therapy treatments from a Registered Massage Therapist. Whether your need is to have a moment of relaxation, reduce muscle tension or attain relief from chronic pain, a therapeutic massage can enhance your overall sense of emotional and physical well-being. Massage therapy can be an important part of your health maintenance plan by:

- Reducing or eliminating pain.
- Improving joint mobility.
- Improving circulation.
- Improving lymphatic drainage.
- Reducing muscular tension.

Massage Therapy can also be used as part of a preventative care program. This includes sports training, injury prevention, ongoing stress management, and more! Together, you and your therapist will develop a treatment plan based on your needs. The treatment plan can be changed at any time and you have no obligation to undergo any part of treatment. Your treatment begins after you've given your informed consent. Massage therapy can be used for the treatment of both acute and chronic conditions.

Physical Massage Benefits

- Helps relieve stress and aids relaxation
- Helps relieve muscle tension and stiffness
- Alleviates discomfort during pregnancy
- Fosters faster healing of strained muscles and sprained ligaments; reduces pain and swelling; reduces formation of excessive scar tissue
- Reduces muscle spasms
- Provides greater joint flexibility and range of motion
- Enhances athletic performance
- Treats injuries caused during sports or work
- Promotes deeper and easier breathing
- Improves circulation of blood and movement of lymph fluids
- Reduces blood pressure
- Helps relieve tension-related headaches and effects of eye-strain



- Enhances the health and nourishment of skin
- Improves posture
- Strengthens the immune system
- Treats musculoskeletal problems
- Post operative rehabilitation
- Rehabilitation after injury

Conclusion

It was concluding that Sports massage should play an important part in the life of any sportsman or woman whether they are injured or not. Massage has a number of benefits physical, physiological and psychological. Sports massage can help maintain the body in generally better condition, prevent injuries and loss of mobility, cure and restore mobility to injured muscle tissue, boost performance and extend the overall life of your sporting career. Research evidence has generally failed to demonstrate massage significantly contributing to the reduction of pain associated with delayed onset muscle soreness, or significantly enhancing sports performance and recovery, or playing a significant role in the rehabilitation of sports injuries. Design flaws in research have challenged some of the positive outcomes. Additional studies examining the physiological and psychological effects of sports massage are necessary in order to enhance the sports physical therapists' ability to develop and implement clinically significant evidence based programs or treatments.

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