



Role of Ayurvedic Massage for Improving Athletes Performance and Healing: A Case Study

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Abstract

Ayurvedic sports massage can be used as a complementary therapy for athletes recovering from injuries. It is an effective approach to fatigue fighting, pain elimination, and accelerating body regeneration processes. The most often applied techniques include effleurage (stroking), petrissage (kneading), friction, and rolling using a massage roller. A massage always energizes the body from the inside out and has many other advantages. It may be advantageous for anyone experiencing body or muscular fatigue. If you have certain regions of your body that hurts an ayurvedic massage is a great option. The frequency of massage therapy depends on the specific injury and the individual athlete's needs, but it is typically recommended to have regular sessions throughout the recovery process. Ayurveda also offers psychological components such as drugs, diet, Panchakarma, lifestyle changes, meditation, and yoga, which can be beneficial in sports psychology and injury rehabilitation. Ayurvedic sports massage is a great way to support and feed internal organs and tissues. Ayurvedic sports massage is one of the several ayurvedic treatments available to athletes.

Key Words: *Sports Massage, Sports Injuries, Physiological Mechanisms, Neurophysiological, Panchakarma.*

Introduction:

I: Role of Ayurveda in Sports:

Ayurveda is popular and well known in India since the ancient time. Ayurveda was the core of lifestyle of Indian people and used to treat diseases before the modern Allopathic system came into existence. The Ayurvedic herbs were also used for enhancing the performance in sports which was very effective and safe. Even the foreign countries used some herbs in different ways. But due to increase in popularities of modern medicine system at the end of eighteenth century, the popularity and faith in Ayurveda started decreasing. From the last one to two decades Ayurveda has once again gained popularity not in India but also all over the world. Some research studies also indicate that Ayurveda is not only useful in treatment of diseases but also useful for enhancing the physical capacities of human being which directly correlates with sports performance. In this study, we have described the uses of one Ayurvedic herb Ashwagandha on sports performances. As per our study and some others study we can say that Ashwagandha is very useful for improving strength and maximum strength of the sports persons and it is significantly improve the Explosive strength.

II: Ayurvedic Treatments:

Ayurvedic medicine is a kind of Indian traditional system of medicine that has been practiced for centuries. Treatment options in this system include different therapies of Ayurveda viz. Abhyanga (therapeutic oil massage), different varieties of Swedana (sudation), Vamana (therapeutic emesis), Virechana (therapeutic bowel evacuation), Basti (trans-rectal administration of processed Ayurvedic decoctions), Yoga, internal herbal and herbo-mineral medications, disease-specific dietary advice, etc. The consequence of therapies of Ayurveda works for the elimination of toxins from the body by the stimulation of srotas (micro-channels). In addition to the procedures of classical Ayurveda therapies, the patients desire to take physiotherapy for a speedy recovery from different ailments. It is observed that some patients benefited speedily from the adoption of exercise and manual physiotherapy procedures in an advanced way along with manual maneuvers run by Physiotherapists in addition to Ayurvedic treatments for those patients suffering from Frozen shoulder, varieties of paralysis, spasticity, brachial palsy, etc. The present review aims to describe the essentiality of an integrative approach of physio-therapeutic treatment with Ayurveda therapies to cure the ailment before than time required for individual treatment. A massage is a tool that is frequently used in sports and exercise in general for recovery and increased performance. In this review paper, we aimed to search and systemize current literature findings relating to massages' effects on sports and exercise performance concerning its effects on motor abilities and neurophysiological and psychological mechanisms. Concerning neurophysiological parameters, the massage did not change blood lactate clearance, muscle blood flow, muscle temperature, or activation. However, many studies indicate pain reduction and delayed onset muscle soreness, which are probably

correlated with the reduction of the level of creatine kinase enzyme and psychological mechanisms. In addition, the massage treatment led to a decrease in depression, stress, anxiety, and the perception of fatigue and an increase in mood, relaxation, and the perception of recovery. The direct usage of massages just for gaining results in sport and exercise performance seems questionable. However, it is indirectly connected to performance as an important tool when an athlete should stay focused and relaxed during competition or training and recover after them.

III: Uses of Massage Therapy:

Massage therapy is widely used by athletes for various reasons such as recovery from fatigue, preventing injury, and relaxation. It is believed that massage improves the performance of the athletes by increasing their blood flow, removing lactic acid, and stimulating the nervous system. The study aims to investigate the physiological and neurophysiological effects of sports massage on the athletes' performance, to find out whether the clinical beliefs of sports physiotherapists about the effects of sports massage on sports injuries are supported by scientific evidence or not. Few studies have been conducted on the effect of sports massage on the athletes' performance. The existing studies are heterogeneous, i.e., they have examined the effect of massage on different factors and reported contradictory results. It seems that the effects of sports massage on the athletes' performance are more due to its psychological effects rather than its clinical effects. The effects of sports massage on athletes' performance have not yet been supported by scientific evidence. Many scholars consider that the effects of sports massage are due to increasing blood flow, but there is insufficient scientific evidence. In treatment of tendonitis and muscle strains, there is insufficient evidence that sports massage can reduce pain and accelerate healing. It seems the therapeutic effects of sport massage are more psychological and less physiological.

IV: Role of Ayurved in Sports Medicine:

The ancient medical system called Ayurveda is one of the main systems of Alternative medicines of Indian origin. This is found very practical even in the modern era of medicines due to its unique unbeatable philosophy. We cannot observe any branch of modern system of medicines containing the explanations of sports medicines two centuries ago and obviously the same lack in the literatures of Ayurveda. But the field of medicine is becoming more and more interdisciplinary in nature in this modern era of medicine by incorporating the knowledge from different fields. The field of sports medicines as a separate department was developed recently in the modern medicines. Thus practitioners of Ayurveda also started using the term sports medicines and selected many classical time proven formulations that were found suitable for prescribing for sports injuries of the modern world. They also incorporated many formulations and methods using in different traditional schools related to martial arts and developed many modern medicaments based on them. This paper aims to explain this emerging field by citing certain such traditional formulations and modern medicaments.

V: Benefits of Massage Mechanisms in Sports:

Many coaches, athletes, and sports medicine professionals hold the perception, based on observations and encounters, that massage can provide several benefits to the body. These include improved blood flow, reduced muscle pressure and neurological excitability, and increased sense of well being. Massage can produce mechanical pressure, which is expected to increase muscle mass, compliance, resulting in increased collection of joint motion, decreased unaggressive stiffness, and decreased energetic stiffness, known as biomechanical mechanisms. Mechanised pressure might help to enhance blood circulation by increasing the arteriolar pressure, and accumulating muscle tissue temperature from rubbing. Regarding the massage technique, mechanical pressure on the muscle is likely to increase or decrease nerve organs excitability as measured by H-reflex, which is known as neurological mechanisms. This is seen in parasympathetic activity (as assessed by heart rate, blood pressure, and heart rate variability) and junk levels (as simply measured by cortisol levels following therapeutic massage, causing a relaxation response), known as physiological mechanisms. A reduction in anxiety and an improvement in mood condition also cause relaxation, which is referred to as psychological mechanisms after the massage. Post-exercise, therapeutic massage has been recognized to lessen the severity of muscle soreness, but massage does not have any effects on muscle practical loss. Nevertheless, regarding the belief that massage therapy has benefits for sports athletes, there are no clear effects of different types of massage (Petrissage, Effleurage, Friction) or the appropriate timing of massage (pre-exercise and post-exercise) on performance, recovery from injury, or as a personal injury prevention method. Therefore, this article investigates the possible mechanisms of massage and provides a discourse on the

limited evidence of therapeutic massage on performance, recovery, and muscle injury prevention. The main purpose of this article is to examine mechanisms of massage and its benefits in performance, muscle recovery, and injury prevention. This study may help coaches, sport and health professionals, and researchers to understand massage mechanisms and benefits for performance, muscle recovery, and injury prevention.

VI: Role of Ayurvedic Massage in Sports performance and Rehabilitation:

Athletes and anyone else involved in intense exercise and activities receive this type of massage. Sports massage with an Ayurvedic focus helps the body nourish itself in order to get ready for physically demanding activities. Numerous techniques are available that are used to help people relax greatly. To loosen up the muscles for relaxation, one could, for example, get an Ayurveda sports massage in middle of a training session. It can also help the tissues repair while you are sleeping. In particular, this aids in the revitalization and energization of bodily cells, promoting the skin's capacity for self-healing and restoring maximum health. A professional therapist is providing massage treatment that has the potential to improve a person's mind, body, and spirit. Abhyanga is a well-liked ayurvedic treatment that stimulates nerve endings with coordinated movement, enhances blood circulation, and helps the body eliminate impurities. Herbs with medical qualities that strengthen tissues, flush out pollutants and impurities, and energize cells are utilized to make the therapeutic oils used in treatment. In abhyanga therapy, the primary focus of the herbal oils is on an individual's dosha, such as vata, pitta, and kapha. These oils aid the body's detoxification by profoundly permeating the cells. Abhyanga practice can have a variety of therapeutic benefits including detoxification. The following list a few therapies that can be used to treat sports related injuries: -

1: BASTI (Therapeutic Enema Therapy) – the foundation of panchakarma basti deals with the imbalance of vata dosha (medicated enemas) are used to nourish tissues, clear the colon and discharge build up toxins. they are made using herbal decoction and oils.

2: NASYA (Errhine Therapy) - The goal of nasya therapy is to balance prana vata, the energy that governs the head and neck. By passing therapeutic oils or herbal powder via the nasal passages, sinus congestion is relieved the mental clarity is enhanced.

3: LEPAM –Applying a medicated herbal paste to bodily parts that requires, extra care is done. Ayurvedic medicine using lepum is well known for lowering inflammation buries and muscles pain.

4: MARMA – This process aids in the stimulation calming and treatment of the body's many marma points.

5: PODIKIZHI – This ayurvedic treatment relieves edema, spasms, and discomfort. It also fortifies tissues and muscles. Podikizhi is used to treat a variety of ailments including physical pain, with hot herbal boluses and medicinal oil.

6: SNEHANA – An essential step before shodhana or purification is snehana. Ghee or oil is utilized in an increasing dose pattern during the operation, this results in the involvement or separation of dosha from every channel in the body. Snehana is important because it helps the body release ama, or poisons and dosha which help the body release this substance during the pradhankarma stage. The two main forms of snehana are Abhyantara snehana (internal oleation) and Bahaya snehana (external oleation).

7: SWEDANA –The Sanskrit word 'swedana' whose root word 'swid' means 'to sweat' represent the therapeutic methods that involve inducing sweating to enhance wellbeing and healing. This age-old remedy generates heat – typically through steam on warm material to cause produce sweating which rids the body of toxins, eases tense muscles, and revitalizes the mind. Swedana is a vital component of ayurvedic medicine that helps the body absorb medical substance more effectively by remove toxins and preparing it for deeper therapies. The technique ranges from localized heat treatment to conventional steam therapy each specifically designed to meet the demand and conditions of the patient.

8: SHIRODHARA – Shirodhara has the ability to calm the hypothalamus, which in turn stimulates the pituitary gland regulation. In order to properly manage stress, it also works to lower increase serotonin levels and stress hormones like noradrenaline and adrenaline.

9: RAKTAMOKSHAN – The process of purifying blood is called Raktamokshana. Either preventive of therapeutic purpose may be served by it. Rakta is blood and Moksha is idea of release. Raktamokshana then, is the therapeutic process of drawing blood from the body. Raktamokshana is a dependable method that can be used to treat skin condition such as pigmentation, indigestion anorexia, drunkenness sour belching excessive sleep etc. Regular raktamokshana practitioners will not experience skin condition, edema, or other bleeding diseases.

10: ABYANGA – By using medicated or herbal oils that are specifically tailored to your natural constitution (dosha) or current condition (vikriti or imbalance) , you can massage your body and release tension and stress from your muscles reduce aches and pains and balance .Vata dosha governs all movement in the body including elimination .It improves the health of the neurological system and musculoskeletal system and guards against muscle strain and damage . Receiving it with the change of the season is ideal as it increase organ function. By balancing the dosha and directing excess toxins into the digestive system for excretion abhyanga massage prepare the body for panchkarma.

VII: PRAKRITI BODILY EQUILIBRIUM:

The balance and harmony between the three dosha- vata, pitta and kapha – are adjusted by panchakarma therapy. This will strengthen immunity and shield the body against disease.

VIII: SPORT'S MASSAGE LIMITATIONS:

Sports massage can be uncomfortable since they involve stretching weary muscles, unlike conventional massages. It may not be very pleasant at first, but only after the massage will the relaxation begin the flow. It is concentrated more in a small area. Throughout the massage, different body position must be maintained. A bit more scheduling may be involved with a lengthier consultation timetable. Ignorance of massage therapy can be a major problem. Muscles and nerves are the primary targets of sports massage. Even lifetime harm can result from a small mistake.

IX: RECEIVING A SPORTS MASSAGE AFFECT YOUR BODY:

Your muscles may ache after receiving an intense sports massage; this is a side effect of DOMS, or delayed onset of muscular soreness. By increasing blood flow, the lactic acid that accumulated during physical activity can be eliminated; hastening the process of muscle recovery through sports massage .it improves a person's performance and endurance.

X: Conclusion:

The current evidence on the efficacy of massage in sports performance and rehabilitation is limited. More research is needed to determine the effectiveness of massage in these areas.

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