

Importance of Ayurveda in Sports Medicine: A Review

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Abstract

Ayurveda is one of the main systems of alternative medicines. It is of Indian origin and found to be practical in modern era due to its philosophy. The term Ayurveda combines two Sanskrit words AYU which means life and Veda which means knowledge or science. Today field of medicine is becoming more and more interdisciplinary in nature by accepting knowledge from different branches of science. Sports medicine is a recently introduced branch which incorporates modern medicine in sports field. Now a days many ayurvedic practitioners 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. This review paper aims to explain different aspects of ayurvedic sports medicine.

Keywords: Ayurveda, Sports Medicine, alternative medicine.

Introduction

Sports medicine is a branch of medicine that deals with physical fitness and the treatment and prevention of injury related to sport and exercise. Although most of the sports teams have a group of physicians, it is only since the late 20th century that sports medicine has emerged as a distinct field of health care. Muscle cramp, ACL (the anterior cruciate ligament) sprains/tear, ankle sprain, shin splints, concussion, muscle strains or fracture are the common sport injuries. Sports medicine has always been difficult to define because it is not a single discipline, but an area that involves many branches of medical science. Its function is not only curative and rehabilitative, but also preventative, which may actually be the most important one of all. Sports medicine can encompass an array of specialties, which including orthopedic surgery, exercise physiology, cardiology, pulmonology, psychiatry, biomechanics, and traumatology. In sport medicine, as per the type of event and the activity, treatment modality will also vary.

Sports Injuries

Sports injuries are injuries that occur during sport, athletic activities, or exercising. Around the globe, there are approximately 30 million students of varies age groups engaged in various sports activities. Of those, about three mil-

lion, of age 14 years and under experience any one type of sports injury annually. According to a study performed at Stanford University, 21 percent of the injuries observed in elite college athletes caused the athlete to miss at least one day of sport, and approximately 77 percent of these injuries involved the lower leg, ankle, or foot. In addition to those sport injuries, the leading cause of death related to sports injuries is traumatic head or neck occurrences. When an athlete complains of pain or an injury, the key to a diagnosis is to obtain a detailed history and examination. An example of a format used to guide an examination and treatment plan is a S.O.A.P note or subjective, objective, assessment, plan. Another important aspect of sport injury is prevention, which helps to reduce potential sport injuries.

Origin

“How to live healthily?” is a question that date back centuries. Healthy living is directly related to diseases, diagnosis and their treatment. It makes medicine the oldest profession to address this problem and is considered to be the science of diagnosis, treatment and prevention of diseases. Medicine was probably first institutionalised by the Ancient Egyptians. The earliest known physician is an Egyptian, Imhotep (2980 BCE), whose name was given to a temple university in Men-Nefer (Memphis), where Hippocrates studied. In India, a collection of texts including therapeutic exercises called ‘Arthava Veda’ can be found in written sources around 8th century BCE. Unfortunately, little is known of this rich cultural heritage. In the 2nd century AD, the first ‘team doctor’, Galen (also known as Claudius Galenus; 131 to 201 AD), was appointed as doctor of the gladiators in the Pergamum Kingdom. The physician only became involved if there was an injury. Galen went to

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Rome in 162 AD and made his mark as a practicing physician. He observed the effects of a sedentary lifestyle and the health consequences of inactivity. Galen's treatise 'On the exercise with the small ball' (medicine ball today) has been welcomed by scholars of ancient sports for its description of ball games and also by scholars of ancient medicine for its discussion of the benefits of exercise. Galen argues that everyone should engage in games of this type. He recommends: "take fresh air, get a good sleep, eat and drink properly, control emotions and empty bowels once a day!" He adds: "no activity is exercise unless you become breathless". Probably this is the birth of sports medicine.

Sports medicine, as a separate medical specialty in medicine filed. Ayurved act as preventive and curative both side, so it is best science which play major role in sport medicine. As we go through the Ayurvedic literature, there is no direct references regarding sports medicine. Even there is no ready-made management plans regarding sports related things. As we does not getting direct reference than most of people concluding that "Ayurveda has nothing to do with sports medicine". But when we observe with the open mind with curious scientist, we find enormous things. From dincharya to achar Rasayana each and every things is play important role in sport science. If we carry a systematic research than Ayurveda could revolutionize & contribute a great. There are seven dhatu [7] (body-tissues) that give form and shape to the human body. In sport medicine mansa (Muscles), asthi (bones) is main dhatu & snayu (ligaments), kandra (tendons) are upadhatu which deals with sport injury. According to Ayurvedic system of medicine, Functions of asthi (Bones) is giving shape and structure to our body [8]. Ligaments, muscles and tendons are connected to asthi. Having strong bones means having a strong body.

Sports Medicine in Ayurveda

Ayurveda is a system of medicine with historical roots in the Indian subcontinent. In countries beyond India, Ayurveda therapies and practices have been integrated in general wellness applications and in some cases in medical use. Modernized practices derived from Ayurveda traditions are a type of alternative medicine. Ayurveda is the art and science of life. Ayurveda is a Sanskrit word derived from the root words: ayus, which means life, and veda, which means knowledge. Knowledge arranged systematically with logic becomes a science. Over time, Ayurveda became the science of life. It has its roots in ancient Vedic literature such as the Rig Veda and encompasses the entirety of human life — the body, mind and spirit. Ayurveda related about prevention and curative both aspects. Although there had been many innovations and additions to the practice of Ayurveda subsequently, but principles of Ayurveda remains the same.

As Ayurved act as preventive and curative both side, it can be the best branch in medicine which play major role in sport medicine. In Ayurvedic literature, there is no di-

rect references regarding sports medicine and no ready-made management plans regarding sports related injuries and conditions. But when we analyse, the literature, from dincharya to achar Rasayana, each and every things is play important role in sport science. If we carry a systematic study on it, we can found that Ayurveda can contribute great things in the field of sports medicine. There are seven dhatu (body-tissues) that give form and shape to the human body. In sport medicine mansa (Muscles), asthi (bones) is main dhatu & snayu (ligaments), kandra (tendons) are upadhatu which deals with sport injury. According to Ayurvedic system of medicine, Functions of asthi (Bones) is giving shape and structure to our body. Ligaments, muscles and tendons are connected to asthi. Having strong bones means having a strong body.

Ayurveda prescribes certain rules to athletes to gain competitive edge in Sports, such as Prakruti (Constitution of Body): The constitution of the body plays a major part in influencing the physical fitness and performance and Sara: Sara means essence. Depending upon the dominance of the Dhatus; individuals are divided into Tvak, Sara, Rakta, Mamsa Sara, Medo Sara, Ashti Sara, Majja Sara, Shukra Sara and Satva Sara. Among these Dhatus, sports persons who are high on Asthi Sara and Shukra Sara excel in sports. Following are some important aspects and practices regarding ayurvedic sports medicine.

1. Yoga

Exercise is one of the eight limbs of Ayurveda. Yoga is a type of exercise often used as a method of rehabilitating and calming the mind. Yoga is considered as a daily routine activity in Ayurveda known as "dinacharya". Also yoga is used for the rehabilitation of the body. Sports medicine often uses yoga as a means increasing vascularity, blood flow, flexibility and strength. It's also used in cohort with several other treatments to ensure the healthiest recovery of bone, nerve and muscle tissue.

2. Injuries

According to Ayurveda, human body should be in a balanced state. An injury on body would create change in both external and internal balance. Finding the balance of applied rehabilitation is crucial here with a caveat. As with any form of conventional Western-style sports medicine, exertion here is not what is aimed for. Ayurvedic literature comments that when we begin to feel so much exertion that we stop breathing through the nose we must stop. This is that caveat. Overexertion in Ayurveda for recovery of injuries is not recommended. We must not push our body beyond 50% load.

3. Food

Ayurvedic Sports Medicine believes that one should spend less time counting calories and focusing on nutrient intake such as vitamin and mineral. One should decide what the body needs based on individual requirement. Lunch should be the primary meal of the day, where breakfast and dinner

are far smaller meals. Regularity of meals is an important part of healing your body through routine. For demanding physical tasks, almond milk is shown to aid digestion and provide a good source of energy. In regards to supplementation in sports, Ayurveda recommends a Rasayana (a potent mixture of herbs) including Amlaki churna. This has shown to aid natural holistic immune booster as well as muscle building (anabolic) properties.

4. Mindset

Where the mind goes the body follows. Focused and control thoughts have been shown to promote natural healing within bodily natural tissue. After a workout, the body release neurotransmitters like oxytocin, dopamine and serotonin. These are responsible for feelings of joy and love. The last thing you need to allow for yourself is time. You can't rush an injury, or you risk the chance of causing yourself even more harm. If you're an athlete that could ground you or double your time of recovery. But that generally translates to more time under tension until you can get back to your usual amazing shape. Check out some of these gentle stretches for an injured back below in just 30 minutes:

Conclusion

Ayurveda is science of life and sports medicine is a new branch of medicine which is under development. Ayurvedic medicines have potent action in acute & chronic injuries. Use of external application and internal medication found to be best in the healing of injuries and prevent edema, stiffness, muscle wasting compared to modern treatment. Early mobilization and proprioception is the great advantage of Ayurvedic combination therapy compared to modern treatment play key role in Rehabilitation in sports. Ayurveda incorporate several principles that can be effectively used for improving the sports medicine as practiced today. Detailed studies using modern principles of investigation should be initiated between different systems of medicine so as bring out the benefit or otherwise of these tenets enunciated in Ayurveda.

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