

Significance of Ayurveda in Sport Medicine

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Abstract:

Ayurveda is the ancient Indian system of medicine. The term Ayurveda combines two Sanskrit words **Ayu** which means life and **Veda** which means knowledge. It is one of the oldest systems of medicine in the world. Sports medicine is a branch of medicine that deals with physical fitness and the treatment of injury related to sports and exercise. Sports medicine has always been difficult to define because it is not a single speciality, but an area that involves many branches. Ayurveda is related about prevention as well as curative aspects, so it is best science which play major role in sports medicine.

In sport the physical fitness is required. Many types of injuries are included in this Branch like, ACL {anterior cruciate ligament}, Sprain, Dislocations, and Strains etc. & how we can treat those particular Injuries by the help of Ayurveda

There are no direct references regarding sports medicine in the Ayurvedic literature. Even there is no ready-made management plans regarding sports related things. But when we observe with open mind, we can find enormous things. Dinacharya, Rutuchaya, Rasayana chikitsa, Panchakarma chikitsa, Marma sharir, Achara rasayana, Yoga therapy, Vyayama, Pathya-Apathya etc. each and every thing is play important role in sports medicine.

The aim of this review study is to exploring hidden references and scope of Ayurveda in sports medicine.

Keywords: Ayurveda, Sports medicine.

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INTRODUCTION:

The ancient medical system called Ayurveda is one of the main systems of alternative medicines of Indian origin. The Ayurveda being one of the leading systems of Alternative medicine cannot be away from new inventions to enter into new fields. This is found very practical even in the modern era of medicines due to its unique unbeatable philosophy. The sports are one of such field where it has to show its power of cure and power of preventing disease.

Sports medicine is a branch of medicine that deals with physical fitness and the treatment of injury related to sports and exercise. In today's world, Sports and physical training have become very professional and competitive. Aggressive competition and intense desire to excel in his field leads to unbearable stress for sports persons. More over physical training and fitness has become an important aspect of any sport. This is the main reason behind increasing incidence of sports injuries. Simultaneously increasing ratio of psychological and psycho- somatic disorders are also the subjects of worry for the sports persons. Sports medicine has always been difficult to define because it is not a single specialty, but an area that involves health care professionals, researchers and educators from a wide variety of disciplines. Its function is not only curative and rehabilitative, but also preventative, which may actually be the most important one of all. Now a day this science is developed as a super specialty branch of the medical science. Importance of sports medicine is therefore increasing day by day. Ayurveda being a complete science of health care can contribute in this field also. Principles, regimen, treatment modalities, dietetics and drugs of Ayurveda can play very useful and important role in this field.

GLOBAL DATA RELATED SPORTS:

Including India there are 5 countries who invest money or funds on sports that is {Germany, UK, FRANCE, AUSTRALIA & India}. The common injuries in sports are ACL Knees Injuries etc.

AIM & OBJECTIVES:

1. To review the preventive and curative role of Ayurveda in sport medicine.
2. To review role of Ayurvedic Regimen, Principle, Diet, etc. in Sport Medicine.

What Is Cause Of Injury?

1. Not using Correct exercise & Techniques.
2. Overtraining.
3. Increasing the intensity of physical activities too quickly.
4. Running / jumping on the hard surface.
5. Wearing the shoes that do not have an enough support.

Here there some reasons, to increase the risk of injury by approximately 15% and another factor is ‘A Balance Diet’. Diet is playing a vital role in recovery as well.

MATERIALS AND METHODS

This is an Extensive literary work conducted using different classical textbooks of Ayurveda along with electronic databases. Literature regarding the aspect of sports medicine in Ayurveda was properly explored and screened in Ayurvedic Texts Injury.

AYURVEDIC CONCEPT IN SPORTS MEDICINE

There are seven dhatu (body-tissues) described by Ayurveda that give form and shape to the human body. In sport medicine mansa (Muscles), asthi (bones) are 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. Therefor having strong bones means having strong body.

Sport medicine as a separate medicine speciality in medicine field. Ayurveda act as preventive and curative both side so is best science which play major role in sport medicine .As we go through the ayurvedic literature , there we is no direct reference 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 the people concluding that ‘Ayurveda has nothing to do with sports medicine’.But when we observe with open minded with curious scientist, we find enormous thing is play important role in our live.

Diseases and their treatment in Ayurveda:

Symptoms of Asthi-Vrudhhi

- Adhyasthi { Bone hypertrophy }
- Adhidant { Extra Teeth Formation }

Symptoms of Asthi-Shay

- Asthi-Bhanga { Pathological Fracture }
- Asthi-Shay { Osteoporosis }
- Asthi-thoda { Inflammation of bones & Joints }
- Asthi -varna { Osteomyelitis }
- Phaka roga { Osteomyelitis }
- Sadhana { Weakness }

Sports Injury as Per Ayurveda Concept:

- Bhagna { Fracture & Dislocation }
- Sadghorrna { Acute Wounds }
- Snayugata Vata { Tendons & Ligaments Injury }

TREATMENT PROTOCOL IN AYURVEDIC SPORTS MEDICINE

- Management of Injuries
- Rehabilitation Of Injuries
- Active Mobilisation

- Passive Mobilisation

INTERNAL MEDICATION

- To Boost of tissue Healing
- To elevate Pain
- To order to strength to Injured part

EXTERNAL THERAPY

- To elevate pain
- Strengthen joints
- To improve joint functions

LEPANA / AALEPA:

- To elevate pain
- To promote tissue healing

KATI-BASTI:

- It is very effectively lower back pain, muscular pain, fatigue syndrome

Some Ayurvedic concept can be correlate with sport medicine are listed below.

▪ Symtoms of Asthivridhi^[1]

- Adhyasthi (Bone hypertrophy)
- Adhidanta (Extra teeth formation)

Symptoms of Asthikshaya^[2]

- Asthibhagna (Pathological fracture)
- Asthikshaya (Osteoporosis)
- Asthotoda (Inflammation of bones and joints)
- Asthivrana (Osteomyelitis)
- Dwijaprapatana (Falling of teeth)
- Phakkaroga (Rickets)
- Sadana (weakness)
- Shrama (Fatigue)

Sports injuries as per Ayurvedic Concept

- Bhagna (Bony injuries/Fracture and dislocation)
- Sadyovrana (Acute wound)

AYURVEDIC INTERVENTIONS IN SPORT MEDICINE

Ayurveda is the oldest system of medicine with an aim of prevention of health of healthy person and cure illness. The Ayurveda can be effectively incorporated in all the fields of sports beginning from training to the treatment. In ancient times many Ayurvedic treatments, regimen and herbal preparations were used by the warriors to enhance their performance during war. Same in today's era we can use Ayurvedic principles, Regimen, herbal preparation in sport medicine to prevent and to cure illness. Ayurveda can intervene at various levels in sports medicine from selection of athlete or sports persons to

diet and daily regimen of a sports man.

ROLE OF DINACHARYA & RUTUCHARYA IN SPORTS MEDICINE

Ayurveda describes not only how to cure diseases but also its lights up on preventive aspects, which are effective in maintaining health of the body, mind and soul. Concepts of lifestyle told in Ayurveda are very unique; evidence based and aims at physical, mental and spiritual well-being which are practical even in the present era. Ayurveda points the importance of daily regime (both day and night) and seasonal routine for preventing the diseases and promoting the health of the individual. It deals with the mental, vocal and physical aspects of wellbeing that should be followed every day. It is essential for sports person to follow the concept of dinacharya and rutucharya because to maintain hygiene of the body as well as mind, to prevent disease in long run, to cleanse and promote the health and the brightness of the sense organs, to enhance and maintain the physical strength, to keep the mind in peace and harmony.

ROLE OF ABHYANGA (MASSAGE) IN SPORT MEDICINE

In Ayurveda there are different types of Massages mentioned according to the need. The Sanskrit term Abhyanga coined by two words Abhi (against or opposite) and Anga (body part or movement) is one of the main massage type thus indicating the movements in different directions. A person who wishes for positive health has to perform this massage every day for better results according to the Ayurveda. This Abhyanga massage not only promotes the health of the person but also prevents and cures the diseases. By nourishing the body it promotes clear vision, shines the skin and gives the good desired physique.

ROLE OF SWEDANA IN SPORT MEDICINE

Swedan karma (Sudation) therapy too can be of great use in the injury of sports. Swedan is a steam treatment explained in Ayurvedic medical science. Swedan is the process of inducing sweat with the help of steam, generated from medicated herbal decoction. Ayurvedic fomentation is usually given after an oil massage. Due to swedan all toxic material, oxidants in the body removed out from body. Its combine act as painkiller action also. Swedan karma increases circulation, reduce inflammation, revitalize and rejuvenates the skin, acts on fat tissue, relieve stress, reduce numbness, stiffness, rigidity, heaviness and improves mobility.

ROLE OF VYAYAMA (DAILY EXERCISE) IN SPORTS MEDICINE

For a sports person the health and physical fitness are very important and for the physical fitness they are doing various physical exercises. Planning the daily routine of exercises by reorganizing and scheduling based on the Ayurvedic principles might be a better step. The Ayurveda defines vyayama (exercises) as any physical activity which is desirable and capable of bringing about bodily stability and increases the strength of body when done in proper measure. Physical exercise brings about lightness, ability to work, stability, resistance to discomfort and alleviation doshas. It stimulates the power of digestion.

ROLE OF YOGA IN SPORT MEDICINE

Yoga plays an important role in sports medicine. Asana, Pranayama, Surya namaskara, kapalbhati, mudra, Meditation and Chalan kriya etc. are usually performed by sports person for various purposes. Yoga improves their concentration. It helps in developing physical fitness and it is also good for

relaxation, good for rehabilitation after injury.

ROLE OF NATURAL ENHANCING AGENT IN SPORT MEDICINE

In any heavy work, person needs instant energy. In ancient times also warriors use some herbal drugs to enhance their performance during war and from which they not getting tired easily. Acharya Charaka described the 50 Mahakashaya in charaka Samhita. Brumhaneeya dasaimani (Muscle builder), Jeevaneeya Dasaimani (Vitaliser), Balakara Dasaimani (Promotes strength) and Sramahara dasaimani (Promotes cheer) drugs are said to have components that can enhance the performance level. These drugs are non-steroidal and probably act by increasing the secretion of the biological hormones and enzymes. Draksha, Priyala, Barbara, Dadima, Parooshaka, Iksu, Yava, Shastika, Phalgu, Jeevaka, Rishabhaka, meda, Mahameda, Kakoli, Ksheerakakoli, Mudgaparna, Mashaparni, Jeevanti are examples of such Natural performance enhancing agents.

Ahara Shakti (Examination for intake of food)

Digestive capacity of individual can be examined by two ways that is abhyavaharana shakti (the power of ingestion) and jarana shakti (power of digestion). Person having excellent power of ingestion and digestion of food are claimed to be healthy persons. This kind of person endowed with excellent strength, longevity, joy, good physique, superior mental faculties, full of essence of dhatus, power of resisting any sort of difficulties etc. Thus a good sports person needs to acquire good Ahara Shakti so that he can digest the adequate food in adequate quantity because nutrition is an important aspect for every athlete and sports person.

CONCLUSION

Ayurveda has a very strong foundation of basic principles related to various medical specialties. Majority of these principles can be used in the field of sports medicine. Selection of the sports persons based on various factors described in Ayurveda, daily and seasonal regimens and proper nutrition advised in Ayurveda science, and various Ayurvedic formulations advised for various illnesses can provide solutions to the sports persons. The Ayurveda can be effectively incorporated in all the fields of sports medicine beginning from training to the treatment. The curriculum of the sports training can be effectively modified by including the Ayurvedic concepts of healthy living by following the regimen. The exercises and diet can be designed based on Ayurveda and Yoga for strong physique and mind for better performances. It can also incorporate Rasayana Therapy for building the required stamina according to the personalized needs and requirements. Use of external application and internal medication found to be best in the healing of injuries and prevent oedema, stiffness, muscle wasting compared to modern treatment. Ayurveda can create miracles in various kinds injuries like tennis elbow, heel pain, plantar Fasciitis, heel spur, highland's syndrome, Achilles tendinitis, tenosynovitis, groin injury, long Lasting patellar tendinitis, supra spinatus tendinitis with shorter duration of time compared to modern medicine. Many surgical conditions like meniscal tear, rotator cuff tear, ligament tear, condylar fracture. Patellar dislocation, recurrent shoulder dislocation, back pain and neck pain due to inter vertebral disc disease can be treated and recovered in shorter span of time by integrated method. Degenerative diseases like osteoarthritis, per arthritis affecting the old age can be successful brought back to normal stage and patient can move without pain safely in low treatment cost. Performance enhancement and attaining physical and mental fitness all this can achieve with Ayurveda science.

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