REVIEW ON SPORTS MEDICINES W.S.R TO SPORTS RELATED INJURY AND AYURVED PRINCIPLE OF MANAGEMENT

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ABSTRACT
Ayurveda is the oldest system of medicine with an aim, maintaining the health of healthy person and cure the illness. Though sports related injuries were not mentioned directly in Ayurvedic texts but in ancient times many Ayurvedic formulations were used by warriors to enhance their performance during war and also to heal the injuries & rehabilitation of injured muscles and bones. Injuries in sports are increasing day by day. Injuries like muscle injury, tendon injury, ligament injury becoming more common now a day. In Samhitas references about exercises with its indications & contraindications, benefits & injuries like sandhimukta (dislocation & subluxation), kandabhagna (fractures) and its managements are described. Ayurveda has very effective remedies that can be used as a principal therapy or a supportive measure in problems encountered by sports person. This article aims to understand the sports related injuries and its management, how to avoid such problems in present time.

KEYWORDS: Sports Injury, Ayurveda Management, Samhitas.

INTRODUCTION
Sports related injuries are dealt by sports medicine which is an important branch of medical science, has a recent origin. Sports medicine is difficult to define because it is not a single specialty but an area that includes various phases of sports activities right from diet, life style to management of injuries and rehabilitation program. This article will highlight the proper dietary regimen, management of injuries and rehabilitations.
ABOUT SPORTS MEDICINE

In early days sports injuries were dealt by orthopedicians and later this became a speciality branch of medicine. Sports medicine team consists of orthopedician, surgeon, physiotherapist and they evaluate exercise testing and provides exercise classes, training etc. similar way Ayurveda can prevent sports injuries by following specific Pathya Ahara(diet), technique to rejuvenate muscles and proper Dinacharya (life style). Ayurveda have better management in minor sports injuries like close simple fractures, sprain, strains and soft tissue injuries. Ayurveda has effective remedies that can either be used as a main therapy or as a supportive therapy in numerous orthopedic problems associated with sports. Ayurved also follows marma therapy similar like acupressure which helps in management of pain. Post injury management by Ayurvedic formulations, yoga, pranayama and various steps of Panchakarma like Abhyanga, Sweedana etc. shows fast recovery. Ayurveda can improve the psychological conditions of athletes by following Pathya diet, dinacharya, ritucharya, sadvritta, pranayama, yoga and rasayanas.

Treatment of sports injuries and rehabilitation is a challenging field as it deals with career of an athlete. Ayurvedic sports medicines consisting of various medications, marma therapy (pressure on vital points), various Panchakarma procedures like abhyanga (massage), snehana (oilation), swedana (sweating) etc. By considering the nature of injury related sports type of treatment should be selected. These herbal preparations helps in increasing stamina, preventing injuries, treatment and rehabilitation of injures. They also help in speeding up the process of healing, even after a surgery.

Sports injury as per Ayurveda concepts can be treated as bhagna (fractures), sandhimukta (dislocation & subluxation), sadyovrana (acute wounds), snayu & kandaragatvata (tendon & ligament injury), mamsagatvata (sprain), vranashotha (inflammatory conditions).

TYPES OF MANAGEMENT

Management of sports injuries can be done both by internal medications and external therapies. The chief aim of internal medication is to boost up tissue healing, alleviate the pain and also to strengthen the injured part. The external therapies aims to alleviate pain, strengthens joints and to improve its function. The external application of lepa or upanaha is to alleviate pain and promote tissue healing. Similarly a Panchakarma procedure Kati vasti is very effective in low back pain and muscular pain. Acharya Susruta mentioned vrana bandhanas which helps in quick healing of injury and protection from external infection. Para
Surgical Procedures like agnikarma (heat application) and raktamokshana (bloodletting) helps in reducing inflammation and promote healing. Fracture and dislocation are managed by reduction, immobilization and rehabilitation. In ligament injuries immobilization along with murivenna bandage can be applied. Acharya Sushrut mentioned fracture management by using manipulations like anchana (traction), pidanam (reduction), sanksepa (immobilization) and bandhana (bandaging). In Ayurveda traction done like chakrayoga in urvasthi bhagna, immobilization done using kusha, barks of madhuka, udumbara etc. kapata shayana is a special type of retention indicated in lower limb, pelvic and vertebral fractures. Fractured one has to lie in a wooden cot with 5 bolts that meant to immobilize the affected parts.

Susruta has indicated many herbs like manjistha (Rubia cardifolia), yasthimadhu (Glycyrrhiza glabra), raktachandana (Pterocarpus santalinus), asthishruankhala (Cissus quadrangularis), guggulu (Commiphora mukul) which will help in acceleration of callus formation. The drugs in the sandhaneeya group mentioned by Charaka help in healing, drugs in Jeevaniya group, Balya group to enhance the performances of athletes.

PATHYA AHARA AND VIHARA

Ayurveda insists that diet should be choosen according to the constitutions of every individual. Food that is beneficial for body and mind is Pathya Ahara. The foods which contain snigdha, picchila and guru guna will increase the bala of the body. In annapanas avoid items which increases vatapittadosha and alcohol, which leads to vatapitta vardhana as it leads to risk of injury or less performance. The list of wholesome food are red Sali rice among cereals, green gram among pulses, rock salt among salts, Jeevanti among herbs, meat of deer among animal meats, meat of quail among birds, meat of guana among the animals living in holes, Rohita among fish, Amalaka, water, cow’s milk among milk, cow’s ghee, sesame oil among vegetable oil and honey.

According to Ayurveda the best time for vyayama will be between 6 to 10 a.m. The best season to do Vyayama is during sheeta and vasanta ritu. It is contra indicated in greeshma, varsha and pravrit ritu.

Before starting vyayama abhyanga (massage) should be done to decrease vata vardhana, skin protection and increase stamina. After vyayama whole body can be massaged mildly and can drink ksheera which will remove exhaustion. One can do pratimarsha nasya after physical exercise to remove tiredness. Acharya Susruta explain udvartana i.e upward and downward
movements with oils and dry powders, with the help of palm of hand and udgharshana i.e. more forceful rubbing with greater friction generally with dry powders to strength-then the calf and thigh muscles. Ayurveda explains different types of massage technique and these massages can be used according to the specific conditions to get quick relief. According to Ayurveda physical exercise should be done till the half of the strength (ardha shakthi). Exercise should not be done in vatapitta aggravated condition, in pregnancy and in diseases like indigestion, fever, skin diseases, urinary diseases etc.

REJUVENATION
As per Ayurveda all the sports injuries are aganthuja vyadhi and it affects the madhyama roga marga so the treatment will be difficult (krichra sadhya). The challenges faced by a modern sports person are not just musculo-skeletal but it also includes physical, physiological psychological social, economic, environmental stresses. Ayurveda can effectively work towards physical, stress relieving and in developing concentration. Ayurveda has a holistic approach in sports to maintain inner balance with strong body and immune system. Vyayamasakthi is the capacity to perform physical exercise. After a healthy training session, sport normally makes you feel better and more energetic than before. The physical and mental stamina of sportsman indicate perfect health with tridosha and saptadhatu in their normal condition. However the rasayana therapy for dhatupachaya (proper development of dathu) and balavriddhi (Strength) naturally is most suitable and can be adopted during the training programme. For enhancing the physical powers of a person, Ayurveda offers herbal supplement support. Ayurvedic herbal formulas are said to have components that can enhance the performance level. These were widely used in ancient times by warriors to enhance their performance during war. Some of these are Brimhaneeya dasaimani (Muscle builder), Jeevaneeya Dasaimani (Vitiliser) Balakara Dasaimani (Promotes strength) and Sramahara dasaimani (Promotes cheer). These formulas are non-steroidal and probably act by increasing the secretion of the biological hormones and enzymes in the body.

The rasayana like amalaki has shown to aid natural holistic immune boosters as well as muscle anabolic properties. It also helps to destroy the cell destroying free radicles produced during exercise and sports. The professional athletes need rejuvenating food to reduce damage and undergo Panchakarma therapy to purify the body. Acharya Charaka advises the massage after exercises which would enable the body to endure extreme strain and reduces fatigue. Modern medical science too agrees upon the advantage of massage.
DISCUSSION
Though Ayurveda had been practiced in India since time immemorial, especially for warriors in ancient time, but sports Ayurveda got some recognition in recent time. This relatively new extension of Ayurveda focuses on health aspect of an athlete, including stamina and flexibility of the body. Use of Ayurvedic medicines external and internal found to be best in the healing of injuries, prevent edema, stiffness and muscle wasting when compared to modern treatments. Ayurveda is more beneficial in various kinds of injuries like tennis elbow, heel pain, plantar Fasciitis, heal spur, Achilles tendinitis, tenosynovitis with compared to modern medicine. As these conditions are considered as sira, snayu, sandhi gata vyadhi so management can be done by Abhyanga, Swedana and immobilization by Bandhan. Many surgical conditions like meniscal tear, ligament tear, condylar fracture, Patellar dislocation, recurrent shoulder dislocation, back pain and neck pain due to inter vertebral disc disease can be treated by various procedures of Panchakarma and life of sports persons can be successfully brought back to normal stage and patient can move without pain safely in low treatment cost.

CONCLUSION
In the present era Ayurvedic sports medicine is well recognized and accepted branch of medicine. Ayurveda medicines have potent action in acute and chronic injuries. Ayurveda incorporate several principles that can be effectively used for improving sports medicine as practiced today. For an athlete performance enhancement, attaining physical and mental fitness can be achieved through Ayurvedic medicine. Athletic body needs both internal and external purification through Ayurvedic approach to maintain the health. The herbal treatment will speeds up the tissue regeneration and enable the athlete to go back to sports quickly. Modern medicines like anti-inflammatory, analgesics, antibiotics, barbiturates are gradually proving toxic and naturally affect the fitness of the athletes. Hence Ayurvedic treatments can be used as an alternative therapy.

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