



OFF THE FIELD AYURVEDIC APPROACH: A HELPING HAND FOR THE ON FIELD INJURIES

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ABSTRACT:

Ayurveda is the ancient system of medicine with an aim of maintaining the health of healthy person and cure the illness. Sports injuries can be acute, as a result of a sudden injury, commonly leading to sprains, fractures, muscle and ligament tears. However, some of the injuries occur over time.¹ Though on field injuries were not described directly in Ayurvedic texts but in ancient time many Ayurvedic formulations were used by warriors to boost up their performance during the war and also to heal the injuries & rehabilitation of injured muscles and bones involved in it. On field Injuries are increasing day by day. Injuries like muscle injury, tendon injury, ligament injury occurring more common now a days. In ayurvedic texts references about exercises with its indications & contraindications, benefits & injuries like *sandhimukta* (dislocation & subluxation), *kandabhagna* (fractures) and its prevention and managements are described.² Ayurveda has very effective modalities that can be used as a principal therapy or a supportive measure in problems encountered by sportsman. This article aims to understand the sports related injuries and its management by ayurvedic approach and how to avoid such problems in present time.

KEYWORDS: On field Injury, Ayurvedic prevention & Management, ayurvedic texts, athlete

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INTRODUCTION:

On field injuries that is sports injuries are dealt by sports medicine which is an important branch of medical science, has a recent origin. The branch Sports medicine is very difficult to define because it is not a single speciality but an area that includes various phases of sports activities right from diet, lifestyle to management of injuries and rehabilitation program³. This article will be going to highlight the proper dietary regimen, prevention & management of injuries and rehabilitations. *Charaka acharya* has mentioned *Rasayana* as the method of getting the best qualities of *Rasadi Dhatus* (body tissue) which are *Rasa, Rakta, Mamsa, Meda, Asthi, Majja, Shukra*. Best quality of *Rasa* leads to the formation of best qualities of other *Dhatus*. Thus, *Rasayana* is that important process by which all the body tissues are being nourished. So, *Rasayana* helps in revival, revitalization and regeneration of all body tissues/*Dhatus*.⁴

WHAT IS SPORTS MEDICINE?

In early days, injuries during sports were dealt by orthopedicians and later this became a speciality branch of medicine. Sports medicine team is made up of orthopedician, surgeon, physiotherapist and they arrange exercise testing and provides exercise classes, training etc⁵. Similar way, *Ayurveda* can prevent sports injuries by following specific *Pathya Ahara* (suitable diet), techniques to rejuvenate muscles and by following proper *Dinacharya* (life style). *Ayurveda* has described better treatment modalities in minor sports injuries like- close simple fractures, sprain, strains and soft tissue injuries of various bodyparts. *Ayurveda* has more effective herbs that can either be used as a main therapy or as a supportive therapy in different kinds of orthopedic problems associated with on field injuries. *Ayurveda* also describes *marma* therapy similar like acupressure which helps in reduction of pain. *Ayurveda* can improve the psychological state of sportsperson by following *Pathya ahara, dinacharya, ritucharya, sadvritta, pranayama, yoga* and *rasayanas* accordingly. Treatment modalities of sports injuries and rehabilitation is a challenging field as it deals with career of a sportsperson. Ayurvedic-sports medicines consisting of different medications, *marma* therapy (pressure on vital points), various kinds of *Panchakarma* procedures like *abhyanga* (massage), *snehana* (oilation), *swedana* (sweating) etc⁶. By considering the nature of injury during sports type of treatment should be selected accordingly. Some ayurvedic herbal medicines is helpful in increasing stamina, prevention of injuries, management and rehabilitation of the on field injures. They also help in boosting the process of healing, even after a surgery. On field injury as per Ayurvedic concepts can be treated as *bhagna* (fractures), *sandhimukta* (dislocation & subluxation), *sadyovrana* (acute wounds), *snayu & kandaragatvata* (tendon & ligament injury), *mamsagata vata* (sprain), *vranashotha* (inflammatory conditions).

ROLE OF ABHYANGA (MASSAGE)⁷:

अभ्यङ्गमाचरेन्नित्यं, स जराश्रमवातहा
दृष्टिप्रसादपुष्ट्यायुःस्वप्नसुत्वक्त्वदार्यकृत्॥

Abhyanga / Oil massage should be done daily, it delays ageing, relieves exertion and excess of *vata* (aches and pains). It improves vision, nourishes body tissues, prolongs age, induces good sleep and improves skin tone and complexion.

ROLE OF VYAYAM(EXERCISE)⁸:

**लाघवं कर्मसामर्थ्यं दीप्तोऽग्निर्मेदसः क्षयः।
विभक्तघनगात्रत्वं व्यायामादुपजायते॥**

Exercise brings lightness of the body, it improves ability to do work more, increases digestion power, burns excess fat and it brings body into good shape.

ROLE OF YOGA IN SPORTS:

A specific sport can develop certain muscle groups while ignoring others. Later, this process causes imbalances in the muscles & joints, resulting in overuse injuries. Yoga helps muscles, tendons & ligaments move through a full range of motion, thus initiating balance & core strength which is a immense benefit to athletes in their selective sports. Another important thing in *Yoga* is breath work (*Pranayama*). The attention to breath while performing *Yoga* can be considered one of the most important benefits to athletes. It is important for both physical and mental health of sportsman.⁹

TYPES OF MANAGEMENT:

Management of on field injuries can be done by both internal medications and external therapies. The main aim of internal medication is to boost up tissue healing, alleviate the pain and also to strengthen the injured part of body. The external therapies are used to alleviate pain, strengthens joints and to improve its normal functioning. The external application like *lepa* and *upanaha* is to alleviate pain and promote tissue healing. As like this, a *Panchakarma* procedure like *Kati vasti* is very effective in low back pain and muscular pain. *Acharya Susruta* has mentioned *vrana bandhanas* which is beneficial in quick healing of injury and protection from external infection of wound. Para Surgical Procedures- like *agnikarma* (heat application) and *raktamokshana* (bloodletting) is beneficial in reducing inflammation and promoting healing. Fracture and dislocation can be managed by reduction, immobilization and rehabilitation of affected part. In ligament injuries immobilization along with *murivenna* bandage has great significance. *Acharya Sushrut* has described management of fracture by using manipulations like *anchana* (traction), *pidanam* (reduction), *sanksepa* (immobilization) and *bandhana* (bandaging).¹⁰ In *Ayurveda* traction can be done like *chakrayoga* in *urvasthi bhagna*, immobilization can be done by using *kusha*, barks of *madhuka*, *udumbara* etc. *kapata shayana* is a type of possession indicated in lower limb, pelvic and vertebral fractures of the body. Fractured person has to lie on a wooden cot with 5 bolts that meant to immobilize the fractured parts.¹¹ *Acharya Susruta* has mentioned many drugs like *manjistha* (*Rubia cardifolia*), *raktachandana* (*Pterocarpus santalinus*), *yasthimadhu* (*Glycyrrhiza glabra*), *asthishruankhala* (*Cissus quadrangularis*), *guggulu* (*Commiphora mukul*) which will be beneficial in acceleration of callus formation. The drugs mentioned in the *sandhaneeya* group by *Charaka* help in healing, drugs of *Jeevaniya* group, *bruhaniya* group and *Balya* group is helpful to enhance the performances of athletes.¹²

PATHYA AHARA AND VIHARA:

Ayurveda mentioned that diet should be chosen accordingly to the constitutions of every individual sportsman. Food items which is beneficial for body and mind is to be termed as *Pathya Ahara*. The foods which is having *snigdha*, *picchila* and *guru guna* will be beneficial to increase the *bala* of the body. In diet, avoid items which increases *vata-pitta dosha* and alcoholic beverages, which will going to do *vata-pitta vardhana* as it leads to risk of injury or less performance during the game. According to, *Ayurveda* the suitable time for *vyayama* is in between 6 to 10 a.m. The suitable season to do *Vyayama* is during *Hemant*, *Shishir* and *vasanta ritu*. It is not to be done in *greeshma*, *varsha* and *pravrit ritu*.¹³ Before doing *vyayama*, *abhyanga* (massage) is indicated to decrease *vata vardhana*, skin protection and to increase stamina. After *vyayama* whole body should be massaged mildly and drink *ksheera* which will be helpful in removing exhaustion. One should do *pratimarsha nasya* after doing physical exercise to remove tiredness of the body. *Acharya Susruta* has mentioned *udvartana* i.e upward and downward movements with oils and dry powders, with the help of palms of hands and *udgharshana* i.e. more forceful rubbing with greater friction generally with dry powders to strengthen the calf and thigh muscles of the body. *Ayurveda* mentioned different types of massage techniques and these massages is to be used to the specific conditions to get quick relief accordingly. According to *Ayurvedic* texts physical exercise is to be done till the half of the strength (*ardha shakthi*). Exercise is contra indicated in *vata-pitta* aggravated condition, in *garbhavastha* and in diseases like *ajirna*, *jwara*, *kushtha*, *mutravaha strotovikaras* etc.¹⁴

REJUVENATION:

As per *Ayurvedic* literature all the on field injuries are *aganthuja vyadhi* and it is included in the *madhyama roga marga* so the prognosis of *vyadhi* will be difficult to cure (*krichra sadhya*). The challenges faced by a on field sportsperson are not just musculo-skeletal but it also includes physical, physiological, psychological, social, economic, environmental stresses. *Ayurveda* can effectively work towards physical challenges, stress relieving and also in developing concentration towards the game⁶. *Vyayamasakthi* is defined as the capacity to perform physical exercise. With a healthy training session, sport generally makes you feel better and more energetic than previously. For empowering the physical powers of a sportsperson, *Ayurveda* also has a herbal supplement support. *Ayurvedic* herbal formulations are having components that can boost up the performance level. These formulations were broadly used in ancient times by warriors to enhance their performance in the war. Some group of drugs are described as *Brimhaneeya* (Muscle builder), *Jeevaneeya* (Vitaliser), *Sramahara* (Promotes cheer) and *Balakara* (Promotes strength). These formulations are non-steroidal and act by increasing the secretion of the biological hormones and enzymes in the various parts of the body. The *rasayana* like *amalaki* having quality of immunity booster naturally and also contain muscle anabolic properties. It is also beneficial to destroy the cell destroying free radicles, produced during heavy exercise. Herbs like *Gambhari* (*Gmelina arborea*) have shown a positive result in tissue building and metabolism. Continue administration of such drugs was found to improve nitrogen balance and thus promote tissue building¹⁵. The professional sportsperson needs rejuvenating food to reduce damage and should undergo *Panchakarma* therapy to purify the body as well as to maintain proper state of mind. *Ayurveda* mentions massage after exercise

will help the body to sustain high level of strain and helps to pacify level of fatigue. Modern medical science also agrees upon the advantage of massage.

DISCUSSION:

Though, *Ayurveda* had been practiced in India since very long, especially for warriors in ancient time, but in the field of sports *Ayurveda* has got some recognition in today's era. This updated version of *Ayurveda* focuses on health aspect of a sport person, which includes stamina and flexibility of the body of an individual. A proper use of Ayurvedic medicines externally and internally found to be best in the healing of on field injuries, in prevention of edema, stiffness and muscle wasting when it is compared with allopathic treatments. *Ayurveda* is more significant in various kinds of injuries like tennis elbow, heel pain, plantar Fasciitis, heel spur, Achilles tendinitis, tenosynovitis with compared to allopathic science. As these injuries are considered as *sira, snayu, sandhigata vyadhi* so management can be done by *Abhyanga, Swedana* and immobilization by various kinds of *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 managed by various procedures of *Panchakarma* and life of sports persons can be successfully brought back to normalcy and patient can move without pain safely in low management cost.

CONCLUSION:

In the present scenario, Ayurvedic sports medicine is well established and accepted branch of medicine. Ayurvedic medicines have significant results in acute and chronic injuries. *Ayurveda* emphasizes on several principles that can be effectively used for improving sports medicine as practiced today. For an athlete performance improvement, physical and mental fitness can be gained easily through Ayurvedic management. The herbal treatment will boost up the tissue regeneration and help the athlete to go back to sports quickly. Allopathic medicines like anti-inflammatory, analgesics, antibiotics, barbiturates are subsequently proving toxic and naturally affect the fitness of the sportspersons. Hence, Ayurvedic management can be used as very effectively.

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