INTERNATIONAL AYURVEDIC MEDICAL JOURNAL



Review Article

ISSN: 2320 5091

Impact Factor: 5.344

CONCEPT OF SPORTS PHYSIOTHERAPY AND ITS UTILITY IN AYURVEDA

Jaiprakash Ukey¹, Pramod Gahane², Demendrakumar Thakre³

¹Assistant Professor, Department of Agadtantra, ²Assistant Professor, Department of Kayachikitsa ³Assistant Professor, Department of Sharir Rachana M. S. Ayurved College, Gondia, Maharashtra, India

Email: drjaiprakash2@gmail.com

ABSTRACT

Ayurved is the complete science of life and one of the world's oldest holistic ("whole-body") healing systems. *Ayurveda* incorporates almost all the sciences of ancient and modern era including medicinal sciences. Sports medicine is application of medical principles according to need of sports person. *Ayurveda* has very strong basic principles about disease manifestation and their treatment. The primary aim of *Ayurveda* is said to be prevention of the health of a healthy person and curing the ailments of diseased. This exactly resembles to the aims and objectives of sports medicine. Science of *Ayurveda* can contribute much better than any other medicinal science in the field of education. *Swasthavritta, Ahara Vigyana, Sadavritta* are the prime topics of health education. This can be served as prophylactic mode of treatment. Description of *Vyayama, Snana* (bath), *Abhynga* (massage), various types of *Swedana* (heat application) etc. are treatments which can correlate with physiotherapy.

Keywords: Swasthavritta, Ahara Vigyana, Sadavritta, Abhynga, Physiotherapy.

INTRODUCTION

A sports physician always cares more about the prevention of the health of sports person then the treatment. Therefore, primary health education is very useful tool in the field of sports medicine. A curative aspect of sports medicine is depicted in sports psychology, physiotherapy, sports medicine and sports orthopedics & surgery. All of these are well described in the classics. *Vyayama, Swedana, Abhyanga* and *Snana* like procedures can be used as therapeutic procedures for various types of sports injury conditions. This can be understood in terms of physiotherapy in *Ayurveda*. *Vyayama* is the physical action which is desirable and is capable of bringing about bodily stability and strength is known as physical exercise.¹ The description related to indication and contraindications of *Vyayama* and importance of stopping the exercise at particular time, total absence of exercise as the causative factor of some of the diseases, side effects of over-exertion, over-exercise generated diseases and conditions and their treatment are most important references in respects to sports physiology and sports medicine. Perspiration, enhanced respiration, lightness of the body, inhibition of the heart and such other organs of the body are indicative of the *Vyayama* being performed correctly. This reference also suggests limitation of duration of *Vyayama*. After presence of above-mentioned signs and symptoms one must stop further exercise.²

Aim and Objective

To review the literature and references regarding Sport Physiotherapy and utility in *Ayurveda*.

Sports physiotherapy in Ayurveda: -

1. Snana and Parisheka: Snana (bath) is described under the heading of *Dinacharya* in Ayurveda but now a day it is a popular treatment modality of physiotherapy. Acharya Charaka mentioned the properties of Snana as under³ Bathing is purifying, libidinal stimulant and lifegiving; it removes fatigue, sweating and dirt. It brings about strength in the body and is an aid par excellence for the enhancement of ojas, here "Shramahara" (reducing the fatigue) effect of Snana is important. Warm or hot water used in Snana improves the peripheral circulation resulting in relaxation of muscles which further provide calmness. Moreover, lactic acid which is accumulated in muscle tissues due to heavy physical activity can be dissolved and removed by hot water bath. According to modern physiotherapy there are many types of bath, for example local (of organ) and whole-body bath, steam bath, wax bath etc. Ayurveda also has described Avagahana and Parisheka like therapies which are like some types of bath. Avagahana means sinking of organ in simple hot water or medicated decoction etc. and Parisheka means pouring of any medicated liquids on affected organs. Ayurveda described both procedures as the types of Swedana, but they can be more like the bath of modern physiotherapy. Not only the hot water and medical decoctions but Ayurveda uses various medicated oils and sometime even Ghrita (ghee) for the purpose of Avagahana and Parisheka.

2. Abhyanga Vigyana (massage therapy) in Ayur-veda: -

Abhyanga is described as a routine procedure of *Dinacharya* as well as the preliminary procedure of Panchakarma therapy. Various oils are used for *Abhyanga* in various kinds of ailments. It is said to be one of the best treatments for *Vata Vyadhi*. According to modern physiotherapy massage are of two types i.e. Oil massage and Dry massage. Some of the

physiotherapists and naturopaths are using vibro massage too for deep seated tissues. Ayurveda mainly advocates oil massage but some other procedures like Udvartana and Padaghata etc. can be correlated with other types of massage. Abhyanga is said to be very much beneficial for stability of body. It is also said that regular practice of Abhyanga makes body so strong that can bear any kinds of over loading of exercise or physical activity. This point is important for sports persons as they must develop their body in such a way that can tolerate the load of training session and actual game. Abhyanga is also said anti fatigue. It reduces exhaustion, relaxes muscle tissues and improves blood circulation to peripheral tissue. It is also beneficial for the skin. Thus, just after completion of sports game if Abhyanga is applied to the player, it can serve by many ways. Maharshi Sushruta noted analgesic effects of Abhyanga. He said that it is "Rujahara". Many kinds of oils are made in medieval and present era for this purpose. Some of them are very effective counter irritant and can be used as first line emergency treatment for various sprains, stiffness and any similar conditions. Some other oils have systemic effect on Vata Dosha and by that they reduce chronic skeletal or muscular pains. These types of oils can be used for regular practice by a sports man.⁴ As a pitcher, a dry skin, and an axis (of a cart) become strong and resistant by the application of oil, so by the massage of oil the human body becomes strong and smooth-skinned; it is not susceptible to the diseases due to Vata; it is resistant to exhaustions and exertions (physical exercise). Vayu dominates in the tactile sensory organ, and this sensory organ is lodged in the skin; so, one should practice Abhyanga regularly. Chakrapani commented here that, even though all the sense organs consist of all the five basic elements, still the Vayu predominates in the tactile sensory organ (skin).

Advantages of regular massage: One who practices oil massages regularly, the body, even if subjected to injuries or strenuous work, is not much injured; his physique is smooth, flabby, strong and charming. By applying the oil massage regularly, the onslaught of aging is slackened. By massaging oil in the feet, roughness, immobility, dryness, fatigue and numbness are instantaneously cured; tenderness, strength and steadiness of feet are affected; the eyesight becomes clear and *Vata* (vitiated) is relieved thereby. For the Prevention from sciatica, cracking of feet, constriction of vessels and ligaments of feet is ensured if oil massage is applied to the feet regularly.⁵ Massage (of the body with oil, etc.) gives softness to the body, prevents aggravation of *Vata* and *Kapha*, provides good nourishment to the tissue and gives luster and strength to the body.

3. *Vyayama* (exercise) as a treatment procedure in *Ayurveda*:

Acharya Charaka clearly mentioned that there is no other thing as exercise for bringing about firmness of body.⁶ Sushruta said that there is no other alternative of exercise for reducing obesity.⁷ Moreover Sushruta opines that Vyayama is Tridosha hara. Because of this, properly prescribed exercise can help in the treatment of any disease. Some direct references are also available where Acharyas used various kinds of exercise/sports as the treatment procedure of conditions. For example, swimming is the best treatment for Urahasthambha. Similarly, management of the diseases caused by over nutrition includes Vyayama as one of the important therapeutic procedure.⁸

4. Swedana (Heat application): -

Swedana or heat application is another important preliminary procedure of Panchakarma. It has its own independent therapeutically values. Detail description of Swedana is found in Charaka Samhita.⁹ Chiefly it is divided in to two parts according to use of heat. Where heat is applied with the direct help of fire is known as Sagni Swedana while indirect application known as Niragni Swedana. Once again according to application site Swedana is divided as Ekanga (local) and Sarvanga (general) Sweda. In modern sports physiotherapy hot water bags and electric heating pads are most popular things. Both can be included in Niragni Swedana. This kind of heat application can apply on any part of the body as well as on full body. It can be used at any place and at any time. It provides quick relief in pain, stiffness and hematoma etc. conditions. According to classical reference Swedana reduces stiffness (Stambha) and heaviness (Gaurava). It also increases elasticity of the body. It is said that even a dry

wood can bend by application of oil and heat. This example shows capacity of Swedana to produce softness in the body. Fomentation is also useful for pain in the ear, neck and head, paralysis of the face, one limb, whole body or half of the body, in flexures of the body, stiffness of lateral and posterior parts of the body, lumber region and abdomen, sciatica, malaise, pain and stiffness of feet, knee, calf, edema, *Khalli* (neuralgia of upper and lower extremities), *Vata Kantaka* (affliction of the ankle joint by *Vata*), in contraction, extension or colic pain, stiffness excessive heaviness, numbness and in deceases affecting the whole body.¹⁰

DISCUSSION

Sports physiotherapy means the use of physical (nonmedical) techniques for curing the injuries. This branch of sports science is very much important in sports medicine, because it works on the rehabilitation programme of sports persons and restores their performance ability. It cures chronic injuries of the joints; establish maximum movements of extremities and other joints of the body. It works slowly and as per the type of injury and location; it takes different time and management procedure. In many of the disorders Ayurveda advocates Vyayama as one of the treatments. Description of Snana (bath), Abhyanga (massage), various types of Swedana (heat application) etc. are treatments which can correlate with physiotherapy. Ayurvedic physicians use these techniques to relieve the pain, stiffness, heaviness and for relaxation etc. actions. Many of them are the chief treatment for Vata Dosha, which is prime and most common cause of sports related disorders. Principle of correct exercise method is also described here. When a healthy individual or sports person does physical exercise for the purpose of fitness or gain efficacy in relevant sports, he should stop at his 1/2 of the own work capacity, otherwise with over work-load or training exertion, he may not perform well in actual competition or may get injured. Parisheka is said to be very much beneficial in joint dislocations and fractures. It is also a very nice pain reliever in the condition of struck and lacerated wound.11 Parisheka removes the sense of fatigue and (aggravation of) Vata, stabilizes the dislocated joint and ameliorates pain occurring due to

laceration, burns, bruising and scratching. The types of fomentation in *Ayurveda* that can be used only for one organ of the body are *Sankara, Nadi* etc.¹² whereas those which are applicable to the whole body are *Prastara, Jentaka* etc. Wet type of fomentation is prescribed for *Vatika* diseases, those of dry type for *Shlaishmika* diseases and those of wet cum dry type for the *Vatika-shlaishmika* diseases. If the disease or Sport Injury is of serious type, if the season is very cold and if the body of the patient is very strong, strong fomentation is prescribed. If the disease is mild, the season is moderately cold, and the body is weak, mild fomentation is prescribed. If all are of moderate nature, then moderate fomentation is prescribed.¹³

CONCLUSION

In sport Physiotherapy, Physical exercise (*Vyayama*) brings about lightness, ability to work, stability resistance to discomfort and alleviation of *Doshas* (especially *Kapha*). It stimulates the power of digestion. A person who does *Vyayama* regularly is not susceptible to the sudden depredation (premature onset) to senility and his muscles become well developed. *Ayurvedic* physician also can contribute in sport physiotherapy which helps in bodily nourishment, gracefulness, symmetrical growth of the body parts, improved digestion, agility, firmness, lightness, cleanliness, capability for tolerating fatigue, weariness, thirst, heat and cold, etc. and sound health.

REFERENCES

- Shukla V, editor, (2nd ed.). Charaka Samhita of Charak, Sutra sthan: Chapter 7, Verse 30. Varanasi: Chowkhambha Sanskrit Series, 2002; 77.
- Shukla V, editor, (2nd ed.). Charaka Samhita of Charak, Sutra sthan: Chapter 7, Verse 34. Varanasi: Chowkhambha Sanskrit Series, 2002; 78.
- Vaidya Jadavaji Trikamji Acharya (editor). Commentary: Ayurveda Deepika of Chakrapanidatta on Charaka Samhita of Charaka, Sutra Sthana, chapter5, verse no.64, Varanasi: Chowkhambha Surbharti Prakashan; Reprint 2005;35
- 4. Vaidya Jadavaji Trikamji Acharya (editor). Commentary: Ayurveda Deepika of Chakrapanidatta on Charaka Samhita of Charaka, Sutra Sthana, chapter5, verse

no.85, Varanasi: Chowkhambha Surbharti Prakashan; Reprint 2005;36

- Vaidya Jadavaji Trikamji Acharya (editor). Commentary: Ayurveda Deepika of Chakrapanidatta on Charaka Samhita of Charaka, Sutra Sthana, chapter5, verse no.30, Varanasi: Chowkhambha Surbharti Prakashan; Reprint 2005;34
- Vaidya Jadavaji Trikamji Acharya (editor). Commentary: Ayurveda Deepika of Chakrapanidatta on Charaka Samhita of Charaka, Sutra Sthana, chapter25, verse no.40, Varanasi: Chowkhambha Surbharti Prakashan; Reprint2005;125
- Prof. K.R. Srikantha Murthy editor. 1st ed, Susruta Samhita, Chikitsasthan, Chapter 24, Verse 41. Vol-II. Varanasi: Chaukhamba Orientalia, 2001; pg 432
- Vaidya Jadavaji Trikamji Acharya (editor). Commentary: Ayurveda Deepika of Chakrapanidatta on Charaka Samhita of Charaka, Sutra sthana, chapter23, verse no.08, Varanasi: Chowkhambha Surbharti Prakashan; Reprint2005;114
- Sharma RK and Bhagwan Dash. editor, (2nd ed.). Charaka Samhita, Sutra Sthana, Chapter 14, Verse 4, English Translation, Reprint. Vol. 4. Varanasi: Chowkhamba Sanskrit Series Office; 2009. pp. 120
- Sharma RK and Bhagwan Dash. editor, (2nd ed.). Charaka Samhita, Sutra Sthana, Chapter 14, Verse 20-24, English Translation, Reprint. Vol. 4. Varanasi: Chowkhamba Sanskrit Series Office; 2009. pp. 122
- Sharma RK and Bhagwan Dash. editor, (2nd ed.). Charaka Samhita, Sutra Sthana, Chapter 14, Verse 63, English Translation, Reprint. Vol. 4. Varanasi: Chowkhamba Sanskrit Series Office; 2009. pp. 124
- Sharma RK and Bhagwan Dash. editor, (2nd ed.). Charaka Samhita, Sutra Sthana, Chapter 14, Verse 98, English Translation, Reprint. Vol. 4. Varanasi: Chowkhamba Sanskrit Series Office; 2009. pp. 128
- Prof. K.R. Srikantha Murthy editor. 1st ed, Sushruta Samhita, Chikitsasthan, Chapter 24, Verse 31. Vol-II. Varanasi: Chaukhamba Orientalia, 2001; pg 430

Source of Support: Nil Conflict of Interest: None Declared

How to cite this URL: Jaiprakash Ukey et al: Concept Of Sports Physiotherapy And Its Utility In Ayurveda. International Ayurvedic Medical Journal {online} 2019 {cited December, 2019} Available from: http://www.iamj.in/posts/images/upload/2316_2319.pdf