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A Review on Importance of *Vyayama* and its Relation with *Agni* in Maintenance of Health

Author: Aarti Kaushik¹

Co Authors: M B Gaur²

^{1,2}Department of Kriya Sharir, Ch. Brahm Prakash Ayurved Charak Sansthan, Khera Dabar, New Delhi, India

ABSTRACT

Ayurveda being the most holistic and ancient medicinal system is well known for maintenance and promotion of health in which the role of *Vyayama* (exercise/structured physical activities) plays a significant role. It emphasizes on the firm affinity between the body, mind and spirit. Life or living being has been conceived as a composite entity consisting of a physical body superadded with highly sensitive sense perception. In *Ayurveda*, health is denoted by equilibrium between body, mind, spirit and social well-being. It is stated that the Health is a state of normalcy characterized by balanced equilibrium of the three *Dosas*, the thirteen types of *Agnis*, seven types of *Dhatus* and the *Malas* besides the optimum happiness of the Mind (*Manas*), senses (*indriyas*) and the spirit (*Atma*).

Vyayama or physical exercise is very much important in today's life to keep one healthy and disease free. *Vyayama* helps in maintenance of healthy state of an individual by maintaining balance of three *Doshas* (i.e., *Vata*, *Pitta* and *Kapha*), stimulation of *Agni* (~ digestive and metabolic strength), enhances *Oja* (~ mental and physical capacity to resist diseases) and helps in maintenance of homeostasis. The intensity and amount of *vyayama* should be done as per proper guidelines to avoid any adverse effect. The effects of exercises varies as per different *prakriti*. *Vyayama* stimulates digestive fire which in turn is associated for all the functioning and metabolism of body thereby playing an important role in maintenance of health of an individual.

Key Words *Vyayama*, *Agni*, *Health*, *Physical exercise*

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INTRODUCTION

Ayurveda is traditional system of medicine practiced in India since thousand years. It includes description on innumerable preventive measures under the regimes of *Dincharya* (daily routine), *Ritucharya* (seasonal regimen) and *Sadvritta* (physical, mental and social code of conduct). *Vyayama* holds a description under

different contexts such as: *Dincharya* (daily routine), *Anagatabadha pratisedha* (prevention of future diseases), *Balavriddhikara bhava* (factors enhancing immunity and strength) and also in relation to *Dashavidhaatura pariksha* (ten-fold examination of a patient) in which assessment of *Vyayamashakti* (evaluation of the

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body strength) is one of the important factors^{1,2,3,4}.

In *Ayurveda*, the term “*Agni*” refers to in the sense of digestion of food and metabolic products. *Agni* transforms food in the form of energy, which is responsible for all the vital and smooth functioning of the human body. Therefore, *Ayurveda* considers that *Dehagni* is the cause of life, complexion, strength, health, nourishment, lustre, *Oja*, *Teja* (energy) and *Prana* (life energy)⁵.

Vyayama

Any physical activity that involves the endeavour of the body is termed as ‘*Vyayama*’ in ayurvedic literature. *Vyayama* (physical exercise) is mentioned as a part of the daily regimen, which should be practised to a limit of half the energy level of an individual⁶.

Acharya Charak has explained *vyayama* as “Any physical activity performed to increase strength and stability is known as *vyayama*.” A physical action which is desirable and is capable of bringing about bodily stability and strength is known as physical exercise⁷.

As per *Sushruta Samhita* “Activities which produce exertion to the body are known as *vyayama*.” *Acharya* stated that *vyayama* helps in the development, enhances luster, stimulates the digestive power, maintains healthy status, brings stability, stamina, light physique, fatigue tolerance, exhaustion, thirst, heat etc. It also boosts optimum immunity⁸.

Acharya Sushruta has included it in one of the five types of *Ekanta hitakara-vihara*. *Ekanta*

hitakara means the one which can be followed by any individual in the universe to support a healthy status without any contraindications⁹.

IMPORTANCE OF *VYAYAMA*

Vyayama induces healthy growth, brilliant complexion, well-proportionate body, keen digestive fire, stability, feeling of lightness, cleanliness, ability to withstand exertion, fatigue, thirst, heat and cold¹⁰.

Persons who perform daily exercise have the ability to digest unhealthy and inappropriately cooked food without any difficulty. Those who consume fatty foods and possess strong body, physical exercises are beneficial for them. It is because physical exercises stimulate digestive fire which eases the digestion process and helps in nourishment of body¹¹.

MATRA OF *VYAYAMA*

Physical exercise should be done to the level of half of the strength of the person; when *vayu* (*vata*) residing in the region of the heart comes up through the mouth (upward breathing) that is the sign of half the strength of the person¹².

Acharya Charaka quoted *Lakshan of Balardha* – appearance of profuse sweat at axilla, forehead, nose, arms and shoulder and dryness of mouth¹³.

Acharya vagbhat opines the same as *sushruta*. *Vyayam* matra varies from person to person depending upon body constitution, age, gender and overall health. In the cold season and in the spring season it is advised to do exercise up to half depletion of energy, but in summer, rainy and autumn season less than half of the energy should be consumed¹⁴.

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SAMYAGA VYAYAMA LAKSHAN

As per *Acharya Charak* below symptoms are indicative of exercise being performed correctly¹⁵.

1. Sweating (*svedaagamah*)
2. Increased respiratory rate (*svashavridhi*)
3. Increased heart rate (pulse rate) (*hridayoparodhaccha*)
4. Feeling of lightness in body (*gatrnamlaghavam*)
5. Dryness of mouth (*mukhasosha*)
6. Exertion (*Aayasa*)

ATIVYAYAMA SEVANA JANAYA VYADHI

Excessive and inadequate practice of *vyayama* may lead to *shram* (tiredness), *klama* (exhaustion), *kshaya* (depletion), *trishna* (excessive thirst), *raktapitta*, *kasa* (cough), *jvara* and *chardi* (vomiting)¹⁶.

Vyayama varjya

Exercise should be avoided by patients of bleeding disorders, emaciation, dyspnea, cough, injury in the chest and by the person who has taken meal just then, those suffering from thirst and dizziness¹⁷.

EXERCISE

Physical activity is defined as any bodily movement produced by skeletal movements that result in energy expenditure. The exercise is a subset of physical activity that is planned, structured and repetitive and has a final or an intermediate objective for the improvement or maintenance of physical fitness. Regular physical activity or exercise is advised to overcome the obesity because exercise works on fat

metabolism. During exercise mobilization of the fatty acid occurs from the adipose tissues is increased and these free fatty acids are transported to the muscle mitochondria for the oxidation. exercise helps to decrease body fat and control obesity and other obesity related disorders¹⁸.

AGNI

The Sanskrit word *Agni* means “fire”¹⁹. All things in universe are made from *Mahabhuta*. *Agni* is one of the *Mahabhuta* out of five *Panchamahabhuta*. In *Ayurveda*, *Agni* is described as an important factor responsible for digestion and metabolism in our body. Ingested food is to be digested, absorbed and assimilated, which is unavoidable for the maintenance of health, and is performed by *Agni*. The term “*Agni*” is used in relation to digestion of food and metabolic products. Transformation of food in the form of energy is performed by *Agni*, and this energy is utilised for all the vital functions of the body. Therefore, *Ayurveda* considers that *Dehagni* is the cause of lustre, complexion, strength, nourishment, *Oja*, *Teja* (energy), *Prana* and health²⁰.

On the basis of functions and site of action, *Agni* has been divided into 13 types, i.e one *Jatharagni*, five *Bhutagni* and seven *Dhatvagni*. *Charaka* has mentioned about 13 *Agnis* as *Jatharagni* – 1, *Bhutagni*– 5, *Dhatvagni* – 7²¹. According to *Acharya Sushruta*, five types of *Agnis* are illustrated, viz. *Pachakagni*, *Ranjakagni*, *Alochakagni*, *Sadhakagni* and *Bhrajakagni*²².

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Sharangadhara has recognized five *pittas* only (*Pachak, Bhrajak, Ranjak, Alochaka* and *Sadhak*)²³. *Bhavamishra* has followed *Acharya Charaka* and *Vagbhatta*²⁴.

AGNI AND PRAKRITI

Agni varies strongly in relation with different types of *Prakrities* (personalities). In *Vata Prakriti* individual *Vismagni* (unstable digestive & metabolic power) is very common. Persons having *Pitta Prakriti* possess very potent *Agni*. *Mandagni* is common in *Kapha Prakriti* individuals. Homeostasis is also maintained by the proper functioning of the *Agni*. Seasonal variation also affects the functioning of *Agni*²⁵.

Agni as the root cause of all Diseases:

“*Rogah Sarveapi mandagnau*” All the diseases are manifested due to *Mandagni*. To correct these diseases, we have to treat the *Agni* primarily. *Ajirana, Aamdosa, Alasak, Aamvisha, Shokaj atisar, Visuchika, Urustambha* and *Ghrahni-roga* etc. are diseases related to *Agni*. *Vata rogas*; pain & paralysis associated with *Vishamagni*. Acidity & *Daha* associated with *Tikshnagni*, come under the category of *Pitta rogas*. *Kapha rogas*; anorexia & *Aam* are associated with *Mandagni*. *Mandagni* and *Vishamagni* causes accumulation of *Ama* and *Rasadhatu- dushti* which leads to symptoms like *Srotorodha, Balabhramsa, Anilmudhata, Alasya, Malasanga* and *Aruchi*. In elder age (geriatric condition) potency of *Agni* weakens as *vata* increases and it leads to degeneration, decay, atrophy and disturbed metabolism followed by pathogenesis of disease. Even *Dhatwagni* when reduces leads to

formation of *Ama* in *dhatu* which results in improper *dhatu- vridhhi*²⁶.

DISCUSSION

In present era, *Agni* is one in all the foremost important doctrines in the ancient science of life. The body's entire range of digestive and metabolic function is aided by the biological transformation media known as *Agni*. *Agnibala* of a person varies with many factors like age, diet, diurnal variations, workout, *Bala, Ritu* etc. Ayurvedic text believes that the root cause of all the disease is *Agni Mandya*. And *Vyayama* is considered with the stimulation of *Agni* (digestive fire) which is essential for all the metabolic process at the cellular level. The physiological factors that take part in the stimulation of *agni* are *ushma, vayu, kleda, Sneha, kaal* and their *samyoga*²⁷. *Acharyas* have had no ambiguity that *pitta* is instrumental factor for *Agni* and responsible for bringing about the *pachana* and *dahana* karma with which production of heat is associated. Physical exercise initiates sweating, increases rate of respiration, contraction of muscles and temperature of the body. It maintains the tone of the muscles present in whole body which leads to proper systemic functions and movements of the body. Physical activity increases blood circulation to the muscles in the digestive system along with whole body, which increases movement of food along the digestive tract – a process known as *Peristalsis* – causing them to

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work more quickly and effectively. The heat produced by physical exercise is responsible for increasing metabolism of the body which in turn can be correlated to digestive fire or *Agni*. Proper functioning of digestive fire is evident from normal tone of the digestive-system, cardiovascular system, strong immunity or resistance against diseases, proper tissue growth and normal functioning of the body. It is also the source of intelligence, nutrition and awareness in the body. It manages many physiological processes of the body from the digestion, reabsorption, circulation, sensations and formation of energy. This affects both body and mind of the human being. A coordination between both body and mind is made by this which leads to a healthy lifestyle.

Regular exercise imparts benefits which can be attributed to its anti-inflammatory effects via reduction in visceral fat mass. This can be explained by proposed mechanisms by which exercise reduces visceral adipose tissue which include: reduced adipocyte size, reduced macrophage infiltration, increased blood flow, increased mitochondrial function, facilitated fatty acid oxidation, decreased oxidative stress and improved resistance to cell stress. In this manner exercise helps in reduction of visceral fat mass.

Majority of the diseases are result of malfunctioning of the *Agni* which has been called as central root to health. *Agni* plays vital role in absorption of macro as well as micronutrients, also it is destructive to pathogens also. *Diptagni* prevents the formation of *Ama* i.e the undigested

food, which is considered as the cause of many diseases. So, by performing *Vyayama* or exercise daily one can keep away himself from many diseases and lead a healthy lifestyle.

CONCLUSION

Ayurveda is based on the principle of maintaining the health of the healthy and curing the disease of the diseased person focusses on diet and regimen that needs to be followed to remain healthy. In similar manner *vyayama* plays a vital role in maintainence of health by providing strength, stability, energy, proper functioning of bodily movements and and also of internal organs. It works on the level of *agni* which is the main cause of many of the diseases. Stimulation of *agni* by *vyayama* diverts the life to a healthy living and free from diseases. Thus, one should follow daily regimen including physical exercise to have a healthy and happy lifestyle.

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