

HUMAN BODY AND NATURE – THE UNIQUE CONCEPT

Abstract

Human body is a complex machine. Its formation, structure, working principle is very difficult to understand. Since the beginning of human civilization effort is being made to understand the human body in detail. The modern medical science introduced two branches – (1) Anatomy – to study and research on the structure of the human body and (2) Physiology – the branch to deal with the study and research on the mechanism of functions of the body. But even after continuous effort, it seems that, the secrets of the human body is not being completely explored by the researchers. The effort is continuing and probably it is not possible to say when this mission will reach its goal.

Ayurveda, the ancient system of health science, after continuous research and observation, decided that, the human body is the representative of the nature. 3 humours are the structural and functional units of the human body which are technically named as “TRIDOSHA”. This Tridosha maintains the structural and functional integrity of the human body. Any change in the structural and functional properties of these 3 elements produces disturbance in all aspects.

Charaka, the father of medicine, is the pioneer in the field of study about the human body. He introduced some interesting concepts on the field which can be considered as the unique ones and can be taken for study and research.

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Human body is a complex and very difficult to understand machine. Even after continuous and tireless effort the human being is not being able to understand the anatomical and physiological integrity of this complex structure. To understand each and every part of the human systems an understanding of the mechanism of the process of maintenance of the natural integrity is also important. The nature was considered as the base of the human body by the ancient scholars of medical science (Ayurveda) before thousands of years of Christ. A study and discussion on the concept of the Ayurvedic concepts on the structure and function of the human body is important for the benefit of the society, both to maintain healthy state and deal with a diseased condition.

I. THE COMPONENTS OF THE BODY

VATA – This is the most powerful component of the body . It's property, actions etc. are discussed below as mentioned by Charaka in the famous book of Ayurveda “Charaka Samhita” –

The properties [1], [2]–

- Dryness (Ruksha)
- Coldness (Shita)
- Lightness (Laghu)
- Minuteness (Sukshma)
- Clarity (Bishada)
- Roughness (Khara)

Practically Vata cannot be seen by our eyes. It's existence can only be felt by it's effects (functions).

When an individual gets exposure to the food and behaviour that are dry, light, cold, rough that causes aggravation of this component of the body. The substances that produce sliminess, oiliness, warmth, smoothness etc. are responsible for pacification of this component [3]. Vata maintains the organs and structures of the body in their own site and also supports them to function. Further Vata is classified into five types – (i)Prana , (ii)Udana , (iii)Samana, (4)Vyana and (5)Apana . It is considered to be the controlling force of the soul that regulates all functions of the body and mind. It also controls the functions of the organs, helps in formation and maintenance of the dhatus (components formed after digestion of food) [4]. The other functions of this important humour in it's natural state are –

- Nutrition (Sarira sandhana)
- Speaking (Bachana prabartana)
- Perception of touch and sound (Sparsha and sabda gyanakara)
- Production of happiness and inspiration (Harsha utsahakara)
- Maintenance of digestion (Agni prabartana)
- Regulation of the excretory functions (Bahirmala kshepana)
- Maintenance of the patency of the body channels (Srotasa bhedana)
- Formation and maintenance of foetus (pregnancy) (Garbhakriti kara)

When this Vata becomes imbalanced and abnormal it causes the following situations[5]–

- Reduced strength, colour, happiness, longevity (Bala – Barna – Sukha – Ayunasha)
- Unhappiness (Manoduhkha)
- Destruction / death of foetus (Garbhanasha)
- Abnormality of the foetus (Garbha bikriti)
- Delayed labour and delivery (Garbhabilamba)
- Fear – grief – delirium -depression – talking in excess (Bhaya- shoka-moha- dainya – atipralapakara)
- Loss of life (Prananasha)

The functions of the natural air (Prakrita loka vayu) are described by the scholar as follows-

- Maintenance of natural balance (Dharanidharana)
- Control of fire (Jwalana ujjalana)
- Maintenance of the motion and function of the Sun , Moon , Stars and planets (Aditya -chandra-nakshatra-graha gati bidhana)
- Production of clouds (Megha utpadana)
- Raining (jala bisarga)
- Streaming of the rivers, spring etc. (Srotasa prabartana)
- Production of flower, fruit etc. (Pushpa- fala nibartana)
- Growth of the plants (Udvida udbhedana)
- Change of the seasons (Ritu prabibhaga)
- Maintenance of the nature and property of the natural matels (Dhatu bibhaga, mana rakshana)
- Production of the property in the seeds (Bijabhisanskara)
- Production of corps (Sasyabhibardhana) etc.

When the natural air becomes abnormal it causes the following situations [6] –

- Storm and cyclone in the sea (Sagara utpidana)
- Earthquake (Bhumi akampana)
- Thunder (Megha garjana)
- Abnormal behaviour of the season (Ritu vyapat)
- Destruction or less production of the corps (Sashya anutpada)
- Destruction of lives (Bhuta upasarga) etc.

PITTA – This component of the human body represents the warmth, working strength, digestive capacity etc. This humour is described to have the following qualities [7].-

Slightly oily (Sasneha)

- Hot (Ushna)
- Strong (Sharp)(Tikshna)
- Liquid (Drava)
- Can flow from one place to another (Sara)
- Pungent (Katu)

Functions

The balanced Pitta produces the following functions in the body [8]-

- Digestion (Pakti)
- Vision (Darshana)
- Production and regulation of temperature (Ushma niyantrana)
- Maintenance of body colour and lustre (Barna)
- Production of energy (Sauryya)
- Production of fear (Bhaya utpadana)
- Production and regulation of anger (Krodha)
- Production of happiness (Harsha) etc.

KAFA – This is the component of the body that is the source of calmness, coolness, stability etc. It has the below mentioned properties [9]-

- Heavyness (Guru)
- Coldness (Shita)
- Smoothness (Mridu)
- Oiliness (Snigdha)
- Sweetness (Madhura)
- Stability (Sthira)
- Sliminess (Picchila)

The normal functions of this body humour are [10]-

- Stability (Dadhya)
- Looseness of the body (where necessary , like in the joints) Saithilya
- Nutrition (growth)(Upashaya)
- Inspiration (the will and desire to work) (Utsaha)
- Potency (the strength and ability to produce progeny) (Brishata)
- Knowledge (to acquire knowledge from the right sources appropriately) (Gyana)
- Intelligence (the ability to take decision as per the need of the situation and environment) (Buddhi) etc.

II. TRIDOSHA (THE 3 HUMOURS – VATA, PITTA AND KAFA) WHEN REMAINS IN BALANCED STATE THEN THE FOLLOWING ARE THEIR FUNCTIONS [11] –

- Maintens the structural and functional integrity of the organs (Avyapannendriya)
- Maintains the strength , colour and happiness (Bala- barna – sukhopapanna)
- Maintains the longevity (Ayu)

When the tridosha becomes abnormal or imbalanced then it produces different types of sufferings (mahat biparyyaya) and even death (upaghata).

The study and analysis of the concept of the human body with special reference to structural and functional integrity it becomes clear that, the human body is constituted with 3 basic components, viz. Vata, Pitta and Kafa. Vata is responsible for all internal and external movements, like blood circulation, the process of digestion, formation of the important

products (nutrients) and waste products (excreta) and proper functioning and balancing of the nutrition and excretion. It also regulates the movements of the different organs, like holding and throwing of substance with hands, moving from one place to another by the feet, blinking etc. Comparing the functions of Vata it is said that, it is the representative of natural vayu (air).

Pitta is the other component of the body that represents the production and regulating force of body temperature, digestion, vision etc. This component of the body is the representative of the Suryya (Sun) in the nature.

Kafa performs the functions of maintenance of stability, strength, patience etc. and the integrity of the body by it's characters. It can be considered to be the source of energy and immunity. This important element of the body can be considered as the representative of Soma (Moon) in the nature.

Depending upon the principle of governance of the balance of the nature the human body is also understood by the Ayurvedic authors with the natural principles. Hence Ayurveda is environment friendly and helpful for the human society both with the aim to (1) prevention of the diseases and (2) treatment of the diseases that cause suffering of the people.

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