

4^{ème} Colloque
International
d'Ayurveda

*Organisé par Kiran Vyas les 20 et 21 mai 2006
Sous le Haut Patronage de l'Ambassade de l'Inde*

TAPOVAN-Normandie - Hameau de Anneville
76540 Sassetot-le-Mauconduit - France

TAPOVAN 9, rue Gutenberg 75015 PARIS Tél. 01 45 77 90 59
Site Internet : www.tapovan.com;fr

Ayurveda

Modern research confirms ancient wisdom

By Nikolaos Kostopoulos

The system of Ayurvedic medicine is very ancient. Ayurveda is a part of the Atharva Veda one of the four ancient scriptures describing the relationship of the human being with the Cosmos. It is based on principles derived from a deep and detailed knowledge of all aspects of the human being, physical, mental and spiritual. The name consists of two words (ayus) life and (veda) knowledge.

These two words underline the necessity to understand the principles of life itself before treating any disease because disease itself is a deviation from the harmony of the laws of life.

In recent times medical research has made further significant advances in its understanding of the human system, taking us nearer to the knowledge that clearly existed in ancient times. Concepts such as right and left brain functions, neuroplasticity, regeneration of certain nerve cell layers within the brain are changing the model we had in the past when the brain was considered to be a rather fixed organ as far as its functioning was concerned.

Ayurveda had stressed that every alive being has a unique constitution or Prakruti governed by energies called doshas in the physical level, and gunas in the mental level.

Knowing about our prakruti help us choose ways of life that will create maximum possibilities for health as it is defined in Ayurveda in Susruta samhita:

"Balanced doshas (Bio-energies), balanced agnis (metabolism), balanced dhatus(tissues), balanced malas (excretions), peace of spirit senses and mind"

This balance is not the same for everyone, as the same nutrition, exercise and behavior do not apply to all of us.

Modern research proves the Ayurvedic point of view by creating more unified specialities like psychoneuroendocrinology underlying the principle that mind affects the body and vice-versa and that each one of us has a unique way to react to life's stimuli.

At the same time therapeutic terms as pharmacogenomics mean that we all react in a different way to medications supporting

the Ayurvedic concept of treating the rogi(patient) and not only the roga (disease).

PRINCIPLES OF AYURVEDA

Panchamahabhoota

The five proto-elements are the ether, air, fire, water and earth.

Sound, touch, colour, taste and smell respectively are the characteristics of the five protoelements.

Caraka Samhita. SA. I. 27

Let us look at some basic principles of Ayurveda. All the universe is made of 5 elements: **Space, Air, Fire, Water and Earth**. Each element participates in the microcosm and the macrocosm with its unique characteristic qualities

Space: Non resistance

Air: Movement

Fire: Heat

Water: Fluidity

Earth: Hardness

Let us think now of the human organism as an example of the action of these elements and their qualities.

A fetus needs **space** to be conceived in the uterus, **space** for his physical growth and **space** for all his functions as an alive being. **Space** does not resist to any form of function or movement.

If however the vital space is occupied then all the physiological functions can be disturbed e.g. by a cancerous growth (**space** occupying lesion), to such a degree that death might follow.

Mucous filling up the **space** in the bronchial tubes can create bronchitis, and cholesterol plaques narrowing the **space** in the arteries create cardiovascular diseases.

As long as one is alive there is a constant movement. It is manifested as thought, breathing, blood circulation, swallowing of food, elimination of toxic materials, movements of hands and legs, or in a biochemical level, chemotactic movements of macrophages to fight invading micro-organisms or movement of molecules in and out of cells.

The systems characterized by automaticity having the innate ability of movement in their cells, have as a dominant element the element of **air**. E.g. the nervous system and the smooth muscles in the digestive system.

The human system has metabolism, anabolic and catabolic chemical reactions that produce or absorb heat, synthesize or break down proteins and other molecules maintaining in this way the form and activity of the organism.

The element of **fire** is more abundant in the

organs that are related with the metabolism, as the stomach that digests food, the liver that processes the absorbed nutrients, the hypothalamus that controls the pituitary and regulates the stability of the temperature, the thyroid, etc.

Human body contains 70% **water**. Its fluidity allows the communication between different parts of the body transporting nutrients and toxic materials where it is needed and then eliminating them through the urine, and the sweat.

Each cell has its own microcirculation system where water plays again a major role in the movement of molecules through the reticuloendothelial system.

Human body has a specific mass and a weight. These manifest the qualities of the earth element. Imbalances cause problems as obesity or emaciation like in hypo and hyperthyroidism. It is the stability or the hardness of the element of earth that protects and encompasses the human organism creating the unit of material body. Obesity or excessive earth is one of the causative factors of cardiovascular diseases, diabetes and other degenerative diseases

In Ayurveda it is said that a person communicates with these 5 elements through his 5 senses in the following way :

ÂKÂSA	Space	Sound	--> Hearing
VÂYU	Air	Touch	
AGNIH	Fire	Form	--> Vision
ÂPAH	Water	Taste	
PRITHVÎ	Earth	Smell	

In the last years there is plenty of research published in magazines like Nature, Nature medicine and Nature neuroscience, that analyzes the effect individual stimuli have on the nervous system.

Research in phenomena like biorhythms, show that it is not simply our eyes, that inform us if it is day or night, but complicated mechanisms that stimulate genes in a cyclical way, synchronizing our cells and tissues in order to allow our body to respond to the different needs of day and night.

One can reset these circadian rhythms as they are called by even sending a small beam of light in the knee flexure. We can even alter the thalamic nuclei functions by sending light signals in so called sound areas thus showing the powerful effect of the elements in the structure of the human system.

Modern research shows that the central nervous system is so dynamic that anything that comes in touch with it, little light, a sound, a minute taste or a distant smell initiates a chain reaction that affects even the last cell of our body.

This effect is different in each one of us depending on: 1) Our unique genetics and

2) all the experiences we have absorbed up to the moment we are receiving the stimulus.

The discovery of what is now called neuroplasticity, meaning the ability of the nervous system to alter its dynamics after receiving repeated stimuli, is now opening a new way of understanding of how the 5 elements of Ayurveda affect our system. So in conclusion there is plenty of modern research showing that the 5 elements interact with the nervous system in an incredibly dynamic way.

TRIDOSHA : 3 ENERGIES

Vayu (vata), Pitta and Kapha are the three doshas, in brief; they destroy and support (sustain, maintain) the body when they are abnormal and normal respectively. Ast.Hrd. Su. I. 6.

The next important definition is that of the 3 energies or TRIDOSHA. From the 5 elements the 3 energies emanate in the following way:

Space } VĀTA or airy energy
Air }
Fire --- PITTA or fiery energy
Water } KAPHA or water energy
Earth }

These 3 energies are called TRIDOSHA and constitute the cornerstones of the medical theory of Ayurveda.

CONSTITUTION OR PRAKRUTI

Each person is born with different characteristics or psychosomatic traits. This difference according to Ayurveda is due to the fact that we all have different proportion of these 3 energies. This proportion is determined at the moment of conception of a human and depends on the parents, the time and the place of birth.

Now these energies have their qualities that appear in the next table and are described in the classic books of Ayurveda as follows:

Qualities of the 3 energies

VĀTA: Dry, light, cold, rough, subtle, mobile

PITTA: slightly unctuous, penetrating, hot, light, with bad smell, liquidity, fluidity.

KAPHA: Slimy, cold, heavy, slow, smooth, slippery, steady.

These qualities are superficially simple and it is not easy to see their relationship with modern medicine. If however we approach them in a different way we realize that all these are neurological qualities. How else could we distinguish heavy from light, or cold from hot apart via a healthy functioning nervous system?

We needed a lot of years in modern medicine, to start researching the brain and the genes, as the most important regulating systems of the human system.

In Ayurveda the study of physiology of a person starts with the definition of the 3 energies (TRIDOSHA), that is to say their

genetic traits and the qualities of the 3 doshas or as I mentioned above their dynamic interaction with the nervous system.

THEY KNEW 5000 YEARS AGO THAT GENES AND NERVOUS SYSTEM ARE THE MAIN REGULATING SYSTEMS OF AN ALIVE ORGANISM.

Stress is supposed to be a modern term and medical concept.

However all the Ayurvedic concepts of tridoshas and trigunas are based on the principle that there is an ongoing constant change in all alive systems encompassing both body and mind.

What is therefore stress in Ayurveda?

From the physical point of view we are born with a unique constitution that is expressed as a precise proportion of the 3 Doshas or energies.

From the moment of our birth a continuous dynamic interaction between the universe and our organism starts. We need to maintain a steady temperature, to keep normal levels of chemicals in our blood, and we need to receive and interact with all sorts of sensory stimuli.

As we grow up the stimuli we receive and our responses to them become more and more complex, and potentially dangerous for our psychosomatic balance.

Stress consequently in Ayurveda at the tridosha level is this initial tension that the 3 energies undergo if we do not follow their natural measure in the dynamic interaction with the environment, physical and psychological.

Now these energies have a psychosomatic action. Continuous diet with cold food or lack of warmth in the human communication can have similar results. Work with fluorescent lights, with its characteristic dry quality, or repeated dry, mechanical speech will influence the energy of air.

From the mental point of view stress is any state of rajas and tamas that create a perception of threat in our mind. Stress here is not just the traffic jam, the shouting by the employer, or any other external stimuli but how the mind perceives the whole experience.

In small amounts stress can be stimulating and educating as far as the mind is in a state of sattva but if it is more than the capacity of the individual then it will create imbalances in both the psychological and physical levels.

Now all these physical states will be influenced by the state of the mind; if there is more rajas and tamas prevalent the human being will not see things in their real dimension and will go deeper in trouble.

On the other hand the effort to be in a state of sattva should be accompanied by proper food and behavior pattern, for the individual otherwise the mind will be influenced by the imbalanced doshas pushed mechanically to a state of rajas and tamas.

The importance of sattva is clear in the following text

PRAGNYAPARADHA

Whatever act is done by one who is deranged of understanding, will or memory, is to be regarded as volitional transgression. It is the inducer of all pathological conditions.

Caraka samhita Sa. I. 102

How is stress managed with the method of Ayurveda?

Firstly one should have an extremely clear knowledge of PRAKRUTI or constitution. This is not as simple as it appears to be, because all the additional changes in our initial nature, that emanate from erroneous diet or behavior, cover sometimes our PRAKRUTI to a vast degree.

In Ayurveda we call this mixed cluster of nature and imbalances VIKRUTI or imbalanced state of constitution.

Afterwards one should take an exceptionally detailed history in order to know how the patient eats, moves, thinks, feels, and generally how he lives as a whole person.

Only then the doctor might discover which energies constitute his initial Nature, why they were imbalanced and how they influenced the rest of his system.

Afterwards he should propose ways that will restore the initial balance of the energies. These ways should be compatible with the lifestyle and circumstances of the patient.

Again modern research supports this individualized care of patients recognizing that our genetics and the way our brain is working make us unique and it is for this reason that Ayurveda integrated with modern diagnostic techniques can serve the suffering humanity.

Concluding here is a final sloka that states the purpose of Ayurveda.

IMPORTANCE OF AYURVEDA

Person desirous of (long) life which is the means (instrument) for achieving dharma (righteousness), artha (wealth) and sukha (happiness) should repose utmost faith in the teachings of Ayurveda.

Ast.Hrd. Su. I. 2.

Modern research again shows the importance of balanced lifestyle combining spirituality, creativity, relaxation and self sufficiency in maintaining health for the individual, the environment and the society.

Dr Nikolaos Kostopoulos is a graduate from the Medical University of Athens; an allopath, specialised in pneumology medicine.

He turned towards homeopathy and then ayurvedic medicine, which he is now practicing for more than 10 years.

He is managing the «Holistic Health Centre» in Athens and carries out research work together with Vaidya Ashvin Barot on psychosomatic illnesses and stress management according to ayurveda.