ELUCIDATION OF THE FACTORS TO BE CONSIDERED IN AYURVEDIC CLINICAL PRACTICE

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ABSTRACT: The theory and practice of Ayurveda are based on the doctrine of *tridosa*, according to which disease states spring from the disturbance of the three factors *vata*, *pitta* and *kapha*. Being a wholistic medical system Ayurveda considers several variables in the diagnosis and treatment of diseases. This report identifies these variables in detail and highlights their clinical significance.

Introduction

The Indian medical system of Ayurveda differs from other extant medical practices on several important points. Avurvedic theory and practice are exclusively based on the doctrine of tridosa (three humours), which is derived from the six schools of Indian philosophy namely nyaya, vaisesika, samkhya, yoga, mimamsa and vedanta1. Observation (darsana), palpation (sparsana) and interrogation (prasna) of the patient are the only diagnostic tools recommended in Ayurveda for collecting information on the pathological state. This fundamental difference between Ayurveda and Western medicine is poorly appreciated in present day clinical testing of ayurvedic medicine which employs invariably Western diagnostic protocols. The results of such studies are of controversial nature and consequently the relevance of Ayurveda is often a subject of debate24. We had outlined in an earlier report the variables to be considered in ayurvedic clinical practice⁵. These factors

are identified in detail in this communication. Attempt has also been made to highlight their clinical significance.

The tridosa Concept

According to the doctrine of *tridosa*, the body remains in a healthy state as long as the *tridosa* (vata, pitta and kapha) are in undisturbed steady state and disease is a result of their imbalance⁶. The *tridosa* produce specific symptoms when the constituent humours are in "high" or "low" stages of activity⁷. Clear understanding of the various aspects of the humoural imbalance is pivotal to effective treatment⁸.

The *tridosa* doctrine makes it possible to obtain an approximate estimate of the primary cause of pathology in an individual. The utility of this approach is exemplified by Caraka's statement that as long as a physician can understand the nature of the humoural imbalance, he need not feel inferior, even if he fails to assign a name to the disease.

As a first step in the diagnosis and selection of appropriate therapeutic protocol the functional states of vata, pitta and kapha in the patient's body are to be assessed. Judicious use of food, measures and drugs which have qualities antagonistic to those of the humour(s) in question brings back the destablised tridosa to their normal states. For example, if vata is high in a body, the food, measures and drugs should possess qualities opposite to those of vata.

The Variables

Considering the fact that the human organism is part of the cosmos, Ayurveda insists upon the need to examine *minutely* ten factors for effective diagnosis and treatment of diseases?.

i Physiological Constitution

The tridosa exist in varying degrees of dominance even during the state of health. Thus Ayurveda classifies individuals into seven prakriti (constitution) i.e., vata type, pitta type, kapha type, vata-pitta type, pitta-kapha type, vata-kapha type and vata-pitta-kapha type. These prakrti are said to result from dietary and behaviourable patterns of the pregnant woman, dominance of tridosa in the female reproductive tract, the season in which conception occurs and genetic factors. The seven types can be identified by distinct physical, behavioural and psychological features10. It seems that the various animals like mouse, tiger, elephant etc assigned by Susruta to each prakrti are symbolic representations11.

As individuals belonging to each *prakrti* are prone to disease arising out of the destabilisation of the corresponding

humour(s), food, measures and drugs should be selected to facilitate effective control of the humour(s) and to promote their steady state in disease as well as healthy state. For instance, vata and pitta are more likely to get destabilised in a person of vata-pitta-constitution and naturally the food, measures and drugs should have strong vata-pitta-loweing property. Nevertheless, the prakrti should be clearly distinguished from the humoural imbalance (dosakopam). This point is amply discussed in Rasavaisesikasutram of Bhadanta Nagarjuna, a scholar of the pre-Vagbhata era¹².

ii. The Tissue Elements

The human body is made up of seven tissue elements or dhatu (rasam "tissue raktam = "blood", mamsam = "muscle", medas = "adipose tisue", asthi = "bone", majja = "bone marrow" and sukra = reproductive element). The essential products of digestion are collectively called rasam which transforms sequentially into raktam, mamsam, medas, asthi, majja and sukra. The end product of this dhatu cycle is known as oias which is said to circulate in the body imparting strength and vitality. Ojaksaya or diminution of ojas follows the disruption of the dhatu cycle and varying states of illness originate therefrom7. As it is mentioned that minute channels exist in the body for transporting each of the seven dhatu13, it is possible that the terms rasam raktam, mamsam etc do not denote only the gross forms of these tissue elements.

While taking part in the dhatu cycle each dhatu gives out its characteristic mala (waste product). However, purisam (fe-

ces), mutram (urine) and sveda (sweat) are the three principal mala of clinical importance. An intelligent practitioner can accurately gauge the state of dhatu cycle by correlating symptoms and signs with the dhatu, mala and tridosa. Caraka opines that one should also check the states of the dhatu cycle by assessing their "degrees of excellence" (sara). The sum of the eight sara is obviously an indicator of the ojas circulating in the individual.

iii. Digestive Efficiency

Metabolic activities of the human body are regulated by the omnipresent agni (fire) which, for the sake of convenience is classified into thirteen varieties. The ingested food is first digested by jadharagni (adbominal fire) followed by five bhutagni (fires of the five elements), one agni assigned to bhuta present in matter. The essential products of digestion (rasam) enter the dhatu cycle, eah step of which is catalysed by a dhatvagni corresponding to each dhatu¹⁴.

Authorities of Ayurveda consider jadharagni as the prime regulator of metabolism. It is classified into four types depending on the "intensity". Visamagni (irregular) is observed in vata prakrti. Predominance of pitta gives rise to tiksnagni (sharp). Mandagni (dull) results from the influence of kapha. Samagni (regular) is experienced by individuals in whom there is steady state of tridosa^{10,15}.

Malfunctioning of any part of the digestive system is certain to relect in the general physiology. Accordingly, it is not surprising to find symptoms like anorexia,

dryness of mouth, increased salivation, vomiting, indigestion, constipation etc included in ayurvedic nosological literature¹⁶. It is thus obvious that *jadharagni* is a broad term used to describe the state of the entire alimentary tract and not the stomach alone as erroneously believed by many.

The Concept of ama

The essential products of digestion (rasam) are prevented from entering the dhatu cycle in individuals possessing subnormal jadharagni. This in turn causes the liberation of toxic substances collectively called ama, which spread to various parts of the body disturbing the steady state of tridosa¹⁷. Describptions of the various signs and symptoms associated with ama are available¹⁸

Before starting the main line of treatment, the ama present in the body should be eliminated using appropriate drugs and pancakarma techniques. The jadharagni should thereupon be regulated and food, measures and drugs adopted to keep the entire alimentary tract in good tone devoid of tendency to constipate.

iv. Circadian and Circannual Rhythms

The *tridosa* exhibite circadian and circannual rhythms. Day and night start with *kapha* and end with *vata*, the intermediate period being characterised by predominance of *pitta*⁶. Similarly, the *tridosa* fluctuate during the seasons of the year¹⁰. The chronological aspects of *tridosa* are to be considered in diagnosis and slection of medicines and time of their

administration. Vagebhata recommends ten different schedules for administering medicines¹⁷.

The physician is also expected to review the various aspects of the humoural pathology like *caya*, *prakopa* etc as they are important in treatment and prognosis.

v Age

If the life span of an individual is divided into three equal parts (childhood, adulthood, old age), the first part will be dominated by kapha, followed by pitta and vata respectively. The age of the patient helps the physician to make prognosis. It is also helpful in deciding the dosage of medicines.

vi Stamina

Caraka Samhita states that stamina (balam) is of three types. Due to genetic factors an individual possesses inherent strength. The season of the year and the age of the individual, by virtue of their tridosa-modulating qualities, after the strength and so does the adoption of food and measures19. The constitutional and temporal aspects of balam should be considered in the selection of such food and measures which help the body to regain the state of health. For instance, strong purgatives and emetics are not to be administered to children and the elderly. It is said that the term balam also connotes the intensity of the disease(rogabalam).

vii The Type of Country.

Depending on climatic and geographical features a land (*desam*) is divisible into *jangala* (arid), *anupa* (wet, marshy, syl-

van) and sadharana (mixed) varieties. Vata is predominant in the first one and kapha in the second. The third type is favourable formaintenance of steady state of tridosa⁶. Caraka describes in detail the characteristics of the three types of land²⁰.

The type of country has its own clinical importance. For example, if a vata disease manifests in one individual each of the jangala and anupa areas, the drug should be administered to the former in the medium of clarified butter and the latter should receive only a plain aqueous extract.

It is suggested in recent times that the electromagnetic field changes of the environment can have profound effects on the electromagnetic fields of living creatures causing alterations in their physiology²¹. Protagonists of the self-regulating (Gaia) hypothesis argue that life and the environment are a coupled feedback system, where changes in one element will affect the other and this in turn feeds back on the original change²².

Basing on the diverse meanings of Sanskrit words, some practitioners remark that the term *desam* also means the site of manifestation of the disease (rogadesam).

viii. Homologation

Getting used to wholesome food, drinks and measures is called satmya (homologation). Unwholesome victuals and measures will be injurious in the long run though they do not evoke any immediate adverse reactions. The habits and addictions of a patient need to be understood for achieving homologation. The

ii patient should be instructed to adopt in slow degrees appropriate food and habits which are wholesome and conducive to maintaining steady state of the tridosa. For example, a patient used to the unhealthy practice of eating late in the night is to be educated on the necessity to have an early dinner preferably at dusk so as to be more in tune with the endogenous humoural rhythms. Similarly, medicated wines are to be prescribed to an individual habituated to drinking alcoholic beverages. Gradually he should free himself from the addiction and resort to food. drinks and habits acceptable to his physiological constitution23. As the various aspects of dietetics are treated separately (vide infra), the term satmya means all efforts to achieve comprahensive homologation.

ix Food

Ayurveda states that the physical and mental characteristics of a person are influenced by the type of food. Consequenctly, proper dietetics is essential to maintain health²³. The time of administration of the medicine with reference to the meals and post-prandial drinks (anupana) are to be specified according to the nature of the disease and the medicines prescribed.

Emotional Status

Fear, anxiety and other psychological stresses aggravate the illness. The patient is therefore expected to be optimistic and fearless to undergo treatment^{6,24}. The physician should explain the need for meticulously obeying the instructions and boost

the morale with kind and encouraging words. These suggestions are supported by the recent discovery that healing process is positively influenced by an optimistic outlook. Similar advice is given by yogis specialising in suggestive healing.

Conclusions

It is obvious from this brief review that a "personal" approach is required for the treatment of each patient on account of the several variables. After all, an ayurvedic physician treats (corrects) the pancabhuta structure of individuals and not the disease. It is in this context that the len factors outlined above assume much significance.

As ayurvedic theory correlates qualties of matter, seasons symptoms of diseases and several other factors with vata, pitta and kapha. introduction of any new parameter into ayurvedic practice calls for establishing its relationship with the tridosa, For example, clinical data obtained through instrumental techniques like spectrophotometry, electrocardiography, electromyography and the like are to be rationally correlated with tridosa before they are integrated into Ayurveda. However, as such an exercise seems to be a difficult task in the light of the present state of affairs, it will be more appropriate to use Western medical knowledge and investigation technology for evaluating the success of ayurvedic diagnosis and treatment. Well-controlled comparative clinical trials are essential in this regard. It is certain that such an approach will, in addition to standardising ayurvedic clinial practice itself, contribute many novel ideas to Western medicine in its fight against diseasea".

Advances in scientific research have proved the existence of biological rhythms and a "braingut axis" ²⁸⁻³⁰. Interestiggly, recent studies of psychoneuroimmunologists implicates the "mind" in the causation of diseases ^{31,32}. That such phenomena are already recognised by Ayurveda speaks of the scientificity of the ancient medical philosophy of *tridosa*. Therefore, it will be in the interest of global health care to study dispassionately and systemati-

cally the ayurvedic approach to health and disease.

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