Relation Ship between *Deha Prakriti* and Osteo-Artherities in a 300 cases sample

Kulanatha¹, I.G.P.R. & Pratapasingha², P.A. ¹University of Colombo, Colombo ²National Ayurveda Teaching Hospital, Colombo

Introduction

In affecting all aspects of the human life and the family economy a disease like Osteo Arthritis, the most common Articular disorder, occurring in about 10 percent of the population takes a fore most place among other type of non communicable disease (NCD). This begins asymptomatically in the second and third decades and is extremely common by age 70. This is a major cause of disability among the elderly particularly affecting their quality of life. Progressive thinning of the joint cartilage takes place as the disease proceeds while having the greatest impact on the weight bearing joints. The involvement of these joints is the commonest cause of disability in the elderly population.

Awareness of the basic body type that has a prevalence of this disease and associated factors of disease occurrence will definitely help the preventive aspect of the disease.

Objectives of the Study

- To identify the body type (*deha Prakriti*) of selected 300 OA cases by using epistemologically validated interviewer administered detailed questionnaire for in patients department of the Ayurveda Teaching Hospital.
- To prepare a questionnaire after a thorough study of three main texts (Charaka samhita Susruta, Samhita and Ashtanga Hrida Samgraha).
- To evaluate the results for recognizing the distribution of their age, gender, life style the affected joint, risk factor as well as to evaluate the quality of their life.
- To further evaluate high prevalence body types with their age
- To justify the findings accordingly and to state appropriate suggestions for betterment of the society.

Theoretical Background and Empirical Evidence

In this study, it was revealed that views of authentic texts on the subject of Osteo arthritis and are basically similar to *SandiGata Vata*. The two words can be found in Vedic Literature i.e *Sandhi* and *Vata* implied that this knowledge existed since the Vedic Era.

The Caraka Samhita, the elaborated volume of *Agnivesha Tantra* by *Acharya Dridabala* has enlightened the facts about the diseases while counting under a general category of disease in *vata Dosha (Anila)* residing in body tissue (*Dhatu*) called *Dhatugata Anila Vikara*. The *Dosha* related to the condition identified by Caraka and the clinical features associated in this situation have explained that the vitiated *Vata* produces edema within the tissues and develop pain when it is moving.¹

In Susruta Samhita and the Madhava Nidana a systematic study of the same are described as "*Hanti Sandhi Gate Sandhi Shoola Shopa Karoticha*"². This emphasizes hree main features of the condition; the first is degeneration that takes place in main weight bearing joints(*Hanti Sandhi*). The Pain (*Shoola*) as a main feature of vitiated *Vata Dosha* the main symptom of the disease and the third feature is edema (*shopha* in Caraka and Susruta Samhita), ('*Atopa*' inMadhava Nidana). Authentic text Bhava Prakasha of Bhava Mishra and chakra Datta of Chakrapanie hold the same view of Acharya Susruta but the Bhava Prakasha enlightens the line of treatment. The Yogaratnakara is in the view of Charaka and Susruta having explained the treatment. Ashtanga Samgraha and Ashtanga Hridaya Samhita of Vagbhata show similar view of both Caraka and Susruta and have established the plan for treatment for this disease.

OA is classified in Allopathic System primarily and the etiology is unknown. Changes occurred in synovial joints respectively in response to a local or systemic factor³ end up with losing the normal shape of the joint.

¹ Caraka /Chikitsa 28/37

²Susrutha /Nidana /1/28 ³Devidson (1995)

The causes stated in Ayurveda of this diseases are categorically based on four food patterns. (*Ahara Nidana*), unhealthy life styles (*viharana Nidana*), mental states (*Manasa Nidana*) and the time factor (*Kalaja Nidana*).

In Ayurveda, it is an established hypothesis that the disease manifes tation is basically bound with human body type (Deha Prakriti) and also considered to be the manifestation of compositional complexity of a person. Main five elements of composition of the world or the *Mahabhautic* root to the Vata, Pitta and Kapha are accounted to be the types determining (body constitution) Prakritia expressed to be formed of characteristic physiological, physical and mental features of an individual, and is classified into subgroups depending on specific *dosha* predominance. Equivalent presence of each one of a three *dosha*'s finally falls into seven subgroups⁴ of *Prakriti* a possibility representing a differential combination Vata, Pitta and Kapha. This is the prototype representing the basic formative distinction in a given individual. Observation of *dosha* activity in the body finally brings the account of the Panchamahabhuta and able to identify certain patterns of combinations of the Mahabhuta, the status in the body by tracing them up to Panchbhautic ancestry. And it is determined at the time of union of sperm and the ovum³.Knowledge of the basic *prakriti* of a person is useful to stay in a state of positive health and prevent the disease.⁶

Methodology

300 cases of OA were assessed and interviewer administered questionnaire was used as a validated instrument for identifying body types. In addition to this the written consent was taken from each patient willing to participate before the study.

Exclusive criteria: Patients below 30 years of age and diagnosed with other varieties of Arthritis.

Caraka /Indriya /1/5 ;Sutra /7/39-40

Susruta shareera 4/61-62

Inclusive Criteria: Patients presenting classical features of OA, clinical signs and symptoms of pain (*shoola*), oedema (*Shotha*), stiffness (*Sthabdha*) tenderness (*Sparsha Asahayatha*) and pain while moving (*Akunchana Prasarana Vedana*) of the affected joints.

Key Findings

The results of this study has evaluated to identify the distribution of the highest rangk of age, gender, life style, the affected joint, risk factor and finally the body type of the cases while further evaluating two body types in high prevalence of OA. The key finding of the study were:

- The most prominent body type among the patients was Vata kapha 67 percent in the age limit of 51-60 years, secondly the body type Vata Pitta 42 percent in the age limit of 41-50 years.
- Further it was observed that the highest age range of the sufferers were 51-60 years of age from both gender types. The, number of patients were 136 (45.5%).
- Most of them were ambulatory cases. The number of patients was 258 and (86%).
- The most affected joint was the knee joint; next to the hip joint. The number of patients were 276 (92%) and 140 (46%) respectively.
- The main risk factor identified was hyper mobility of the affected joint next being female. The number of patients was 258 (86%) females and 215 (71%) males respectively.
- Obesity and hereditary factors have affected half of the selected patients .Trauma and osteoporosis were the least affecting factors of this population.

Conclusion

This study concludes the *vata kapha* body type has a strong relationship with Osteo Arthritis.

Identification and understanding *Deha prkriti*as well as learning the measures of preventing disease should be developed in the Society as a reestablishment of a lost key in the Sri Lankan culture. Awareness programs should be launched to make the society aware of the risk factors of disease prevalence considering the negative economical effect.

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