

CONSTITUTIONAL STUDY OF CANCER PATIENTS – ITS PROGNOSTIC AND THERAPEUTIC SCOPE

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ABSTRACT: 28 patients undergoing treatment for Cancer and 57 normal adults are studied for their Prakriti (constitution and temperature) to find out whether there is any difference in the prakriti pattern of Cancer patients when compared with that of normal volunteers. Pitta dominance is found in the prakriti pattern of Cancer patients followed by Kapha dominance. The prognostic therapeutic utility and scope of the knowledge of prakriti patterns are also discussed in this paper.

INTRODUCTION

Cancer, the second major cause of death in the West (the first being heart attack) is the seventh in the order of diseases that cause death in India. With the control of diseases like Tuberculosis, Malaria, Small pox, gastrointestinal infections, heart disease etc. and eradication of malnutrition, the day is not far off, according to international experts, when cancer would become a major threat to life in the developing countries of Asia like India. The fact is that the facilities available in the country for cancer treatment are inadequate besides lack of awareness among the patients about the need for seeking early medical consultation. If treated in the early stages, it can be cured in most cases, or at any rate controlled and the patients enabled to learn to live with it as long as they can, without much suffering and pain.

The repair of a wound is a remarkable phenomenon. The cells around the wound

multiply until they have filled up the gap. Then they cease to multiply. But normal cells stop when the wound is repaired. A cancer begins as the growth of a few cells of the skin or of a muscle and these cells multiply. They continue to do so. They invade all the neighboring tissues and it is this property of continual multiplication irrespective of the needs of other tissues and of the body as a whole which makes them cancer cells. They spread along the lymphatic channels into distant tissues which they develop into secondary tumour.

It may indeed be that the development of cancer is in all circumstances due to the failure of the natural mechanism of resistance to the growth of cancer cells. If this is true, it supports the view that cancer never occur in a healthy subject. Between 1920 and 1956, forty seven well documented cancer cases have been found to have cured themselves¹. Failure of the

protective mechanism causes the appearance of cancer and its recovery, disappearance.

Surgery, radiotherapy, chemotherapy and immunotherapy are the major forms of treatment. In spite of multiple-angled attack, no cure in its real sense has been achieved so far, because its very causative factor(s) or etiology remains still obscure. The theory of multiple causation is favoured because “cancer” designates a multitude of different clinical entities with a wide range of biological behaviours. The need for conducting research programme to determine the etiology of this condition and thereby identify measures for its prevention is obvious. Most of the theories that have been offered regarding the causes of cancer fall into one of the following categories. 1. Embryonic 2. Bio-chemical 3. Infectious agents 4. Genetic.

Ayurveda can play a big role in the last causative factor, namely genetic. A person's health depends on his ‘constitution’ with which he is born and the way in which he adapts himself to his environment. Constitution explains his achievements in ‘Health’ and defeats in ‘Disease’. There is an increasing awareness in modern times of the role played by constitution in the causation of the diseases. In the words of Dunbar² (1943) “it is often more important to know what kind of patient has the disease than what kind of disease the patient has”. The assessment of prakriti (constitution) is part of the diagnostic and prognostic methods in the Science of Ayurveda.

The notion of inter-relationship between the psychic and bodily states is as old as medicine itself³. This concept is given due credit by Hippocrates, Claud Bernard, Freud, etc. Similarly, the concept of the body, psyche etc. has been well known to Ayurveda and much has been written under

the heading of Prakriti. Prakriti in Ayurveda generally means Doshic prakriti formed on the basis of Dosha at the time of fertilization of sperm and ova (Sukra and artava)⁴. The ancient have studied Man as a whole i.e. as a psychosomatic entity. Hence prakriti is determined by taking into account the person as a whole, thereby including his physical features, habits and psychological traits.

The tenfold examinations of Atura (patient) for gaining knowledge of his life span or knowing his physical strength including immunity and the strength of the doshas of the diseases are well known⁵. Except the vikriti, the remaining is meant for understanding the patient's strength and life-span which can help in prescribing the treatment. In short, prakriti assessment has diagnostic, prognostic, preventive and curative utility 6, 7, 8,9,10. It is not the knowledge of the nomenclature, but the knowledge of the involvement of doshas and dushya, which is indispensable for prescribing correct therapeutic measures according to Ayurveda¹¹. The diseases, ‘cancer; translated by some literally as Karkata Vrana, is a condition portrayed by more than one disease in Ayurveda. Granthi, Vidradhi, arbuda and adhimamsa have been mentioned under sotha (oedema) because of utsedhasamanya (similarity of growth or swelling)¹². Valmika and Sarkararbuda also having utsedha have been described under kshudra rogas¹³. The term ‘kshudra’ does not mean only minor ailments but grave or sever types of diseases also¹⁴.

A careful and critical review of Samhitas will reveal that granthi arbuda, sarkararbuda and valmika all represent different stages or types of the disease presently known as cancer. Paka or suppuration associated with granthi and its absence associated arbuda by

Vagbhata deserve consideration¹⁵. Kapha and meda are dominant in arbuda¹⁶. Valmika is Sannipathaja. Granthi lakshanas are the lakshanas of arbuda also¹⁷. Generally these lakshanas particularly pittaja – granthi lakshanas are come across in almost all cancer cases.

The present study aims to find the relation between prakriti pattern and cancer.

MATERIALS AND METHODS:

31 patients of both sexes (Male – 18 Female – 13) of cancer, confirmed by biopsy report are drawn from those attending the out-patient department of the Barnard Institute of Radiology and Cancer, Government General Hospital, Madras. A detailed clinical and social history enquiring into the duration of the diseases, exact location of the lesion, co-existence of other diseases etc., is recorded. The age range is between 17 and 71 years. The site wise distribution of cases is as follows.

Breast – 8 ; Cervix – 3; Bone – 4; Pharynx – 2; Soft tissues – 41; Larynx – 3; Bladder – 1; Lymphatic – 2; Oesophagus – 1; Intracranial – 1; and Blood – 2.

The patients are then assessed for their prakriti with the help of a questionnaire on a face – to – face interrogation. The prakriti questionnaire comprises 2 parts viz., Sariraka (physical) and Manasika (Psychological). The physical features viz. akriti (body build) – (computed on the basis of Broca's Index viz., height in centimeters – 100 = standard weight), netram (eyes), kesam (hair) and habits viz., ahara rasi (ingestion of food), koshtam (bowel habits), nidra (sleep), and sheeta (cold) constitute the Sariraka lakshanas. The Manasika lakshanas consist of krodham (anger), kruthagnatha (gratitude), manasthyryam

(steadiness of mind), Kamechcha (sexual desire), bhakthi (religiosity), and klesasahishnuta (ensurance). Two scores, namely lie and consistency scores are included to provide an index of the reliability of the subject's answers. If either of these scores exceeds a specified value, the whole record is rejected as invalid.

RESULTS AND DISCUSSION

Of the 31 assessed, 2 are rejected on high lie score and 1 on high inconsistency score. Of the 28 case assessed, 1 is vata dominant, 17 are pitta dominant and 10 kapha dominant. 57 normal healthy people are taken as the control group, for comparison with this diseased group. The percentage of pitta dominant prakriti in the normal group is 17.54 as against 60.71 in cancer group and the difference between the two proportions is significant ($p < 0.01$).

Though the causative factor or etiology of cancer is still obscure, from Ayurvedic point of view, it is a disease with the involvement of three doshas, mamsa, rakta and medas as principal dushyas. The etiology (signs and symptoms) and treatment of arbuda (tumour) are the same described under granthi (cyst). Kapha and medas are dominant in arbuda. Instead of describing the arbuda (tumour) as benign or malignant on the basis of the nature of cells, Ayurveda described the prognosis on the basis of the site of affliction and tissue involvement. The tumours arising at marmas (vital organs) and of rakta or mamsa origin are incurable¹⁸. Indirectly the tumours of medas origin may be presumed to be sadhya or kruchrasadhya (unable or of difficult cure).

Among the tissues, the bone tissue is the seat of Vata, the rakta the seat of pitta and rest are the seats of Kapha¹⁹. On the basis of

this general rule as well as the earlier findings, Vata prakriti people, Pitta prakriti people and Kapha prakriti people are more prone to Vatic, Paitic and Slaishmic diseases respectively. In other words, Vatic people to the diseases with the involvement of bone tissues, Pitta prakriti people to diseases with the involvement of rakta tissue and Kapha prakriti people to the diseases with meda, majja and sukra involvement. Pitta prakriti

and Kapha prakriti people both may be prone to the disease with mamsa involvement. From the findings it is patent that 60.71 percent of cancer patients fall under pitta dominant prakriti while only 17.54 percent of normal people come under this category. The difference in the two proportions of Pitta dominance between normal and cancer patients is significant ($P < 0.01$) (vide Table – 1)

TABLE – I

Prakriti Pattern		Number of cases in	
		Cancer	Normal
VATA	VPK	1	4
	VKP	0	4
PITTA	PKV	16	9
	PVK	1	1
KAPHA	KPV	9	20
	KVP	1	19

Kapha dominant prakriti comes next to Pitta dominant prakriti in the incidence of cancer. There is only one case of Vata dominance. If psychology and physical features are studied separately, still Pitta Prakriti has high incidence (53.6% & 50%) followed by Kapha (39.3 % & 39.3%) Vide (Table II)

From the above, it is evident that Pitta dominant prakriti has greater incidence of

cancer followed by Kapha. From Table III, containing type of cancer, it is clear that cancer of soft tissues like breast, cervix etc., and come under Pitta and Kapha dominance respectively. (14 & 8) Under bone cancer, 2 cases belong to Kapha, 1 each to Pitta and Vata. Two cases of blood cancer are seen under Pitta dominance.

TABLE - II

Prakriti Pattern		Number of cases in			
		Physical		Psychological	
		Cancer	Normal	Cancer	Normal
Kapha	KPV	6	14	8	17
	KVP	5	11	3	16
Pitta	PKV	9	12	11	12
	PVK	5	3	4	5
Vata	VKP	0	9	1	6
	VPK	3	8	0	1

TABLE - III

Prakriti Pattern	Bone	Blood	Soft tissue
KPV	1	-	7
KVP	1	-	-
PVK	1	-	-
PKV	-	2	13
VPK	1	-	-
VKP	-	-	-
PKV	-	-	1
KPV	-	-	1

Hence, it is obvious that Pitta prakriti followed by Kapha prakriti are susceptible to cancer particularly of soft tissues. Dissimilarity of prakriti dosha to the doshas of the disease is one of the favourable prognostic points in the treatment of any disease²¹. Similarly, dissimilarity of dosha

and dushya also contribute to good prognosis Vata, Pitta and Kapha are doshas. The seven tissues like rasa, raktha etc., are dushyas. Vata is associated with bone, Pitta with raktha and Kapha with the rest. Vata prakriti people developing bone cancer, pitta prakriti people leukemia or blood cancer and

Kapha prakriti people developing cancer involving other tissues like medas (fat) are considered difficult to cure.

Apart from diagnostic or prognostic value, the study of prakriti helps considerably in the treatment of this disease also. In the treatment of Cancer, Pitta and Kapha hara drugs and diet which at the same time will not aggravate Vata (like silajati) amalaki, haridra, tikta, kashaya rasa vegetables, godhuma, yava, syamaka, anna, avoidance of curd, fish, madhura anna, day time sleep and sedentary habits etc) are beneficial. However, from the point of view of psychology, it is essential to give up or regulate emotional disturbances particularly Pitta vitiating ones like anger, anxiety etc. From the point of view of habits, reductions of kapha and pitta habits are necessary. In physical features, though they are not easily changeable, the dominance of Kapha is to be reduced judiciously by taking lekhana (anti growth) diet leading to reduction of medas or fat. More important use of knowledge of prakriti is in the selection of proper drugs and other therapeutic measures. Bhallataka (semicarpus anacardium), Chitraka (Plumbago zeylacica), Aswagandha (Withania somnifera Dunal) and Alarka (Calotropis gigantea) have been reported by many workers as anti Cancer drugs²². Bhallataka and Chitraka are ushna veeryas. They are Kapha – Vata hara. Therefore Pitta prakriti people or people suffering from Cancer with the involvement of rakta – mamsa should not be administered with Bhallataka or Chitraka indiscriminately. If absolutely necessary, in reduced doses, with suitable anupanas, that too in seetakala, they can be administered. So also is the use of Guggulu (Commiphora mukul).

Aswagandha is the drug of choice in such cases. Kapha prakriti people or diseases with the involvement of medas are better administered with Bhallataka or Chitraka judiciously. Alarka (Solanum trilobatum) is considered thridoshahara. As such it can be administered in all prakriti without any side effect. The same is applicable in the administration of chemotherapy, radiological therapy or x-ray therapy. As all these are of ushna guna, Pitta Prakriti people or cases with the involvement of pittasthana like blood, liver, spleen etc., are to be administered the above therapeutic measures very carefully. The dose and duration of administration worked out on the basis of general adult population is to be reduced in the case of Pitta Prakriti or Pitta dominant disease conditions. The scope and utility of application of the knowledge of prakriti are enormous. Many a resistant cases or drug intolerant cases can be treated with greater ease, once this knowledge is properly used for prognostic and therapeutic purposes. Similarly by prescribing suitable ahara and vihara (diet and exercise) and rasayana drugs, according to prakriti, prevention of this dreaded disease also can be attempted.

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