

Review Article

A need of integrated approach against cancer to improve quality of life insight of Ayurveda- A review

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ABSTRACT:

The number of cancer patients is on rise since last few years. Application of principles of Ayurveda as Aahar, Vihar, Yoga, Panchakarma etc proves to be beneficial in cancer patients. The present article is highlighting role of Ayurveda in management of cancer patients.

Key words: Aahar, Vihar, Yoga

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INTRODUCTION

The international agency for research on cancer estimated indirectly that about 635000 people died from cancer in 2008 representing about 8% of all estimated global cancer death and 6% of all death in India. Cancer is not just one disease, but a large group of almost 100 diseases degrading patient slowly physically mentally and economically, making their life miserable. Two main characteristics of cancer are uncontrolled growth of the cells in the human body and the ability of these cells to migrate from the original site and spread to distant sites. If the spread is not controlled, cancer can result in death. Part of the problem is that the malignant cells are living in and invading normal tissue around it. While some of these tumors can be fairly well circumscribed and isolated, some are quite invasive and spread throughout various parts of the body, making their removal quite difficult.¹

The principle of Ayurveda is based on the equilibrium of tridosha (Vata, Pitta and Kapha) and this can be obtained from herbs and herbal-mineral in the indigenous medicine system which is known from very early times for preventing and curing different tumors. It made scientists to focus researches on complementary and alternative medicine for the

management of cancer. 'Charaka' and 'Sushruta Samhitas' the Ayurvedic textbooks mentioned cancer as 'Granthi' or 'Arbuda'. In malignancy, the tumors caused by altered function of all doshas (Tridoshas) and losing mutual coordination causing tissue damage and resulting in proliferation. Herbal preparations are the basis of aforesaid ayurvedic therapy. Scientifically these preparations work on different biochemical channels to nourish the body ultimately supporting bodily defence systems.¹

Ayurveda, the oldest Indian indigenous medicine system of plant drugs is known from very early times for preventing or suppressing various tumors using these natural drugs. And nowadays scientists are keener to researches on complementary and alternative medicine for the management of cancer. In Ayurvedic concept, according to 'Charaka' and 'Sushruta Samhitas' cancer is described as inflammatory or non-inflammatory swelling and mentioned either as 'Granthi' (minor neoplasm) or 'Arbuda' (major neoplasm). The nervous system (Vata or air), the venous system (Pitta or fire) and the arterial system (Kapha or water) are three basics of Ayurveda and very important for normal body function. In malignant tumors all three systems get out of control (Tridoshas) and lose mutual coordination

that causes tissue damage, resulting critical condition. Tridoshas cause excessive metabolic crisis resulting in proliferation.²

The modern cancer therapy which is known to be burdened by drug-induced toxic side effects hoping for a perfect cure of disease from the complementary and alternative medicine system. The main goal of Ayurvedic therapy is to find the ultimate cause of an illness while the therapeutic approach of Ayurveda is divided into four categories as Prakritisthapani chikitsa (health maintenance), Rasayana chikitsa, (restoration of normal function), Roganashani chikitsa (disease cure) and Naishtiki chikitsa (spiritual approach). Commonly used herbal decoctions reported in Ayurveda are made of multiple herbs possessing great potential for a cancer cure; scientifically these formulations work on multiple biochemical pathways and influence different organ systems all together and nourish the body as a whole by supporting body's defence systems.

DISEASES WHICH CAN BE LABELLED AS CLEAR MALIGNANCY

The diseases falling under this group may be further classified as follows: - (A) Arbuda (Neoplasia) (B) Asadhya Vrana (Malignant ulcer) ARBUDA During Vedic period "ARBUDA" was considered as a serpent like demon conquered by Lord Indra (Monier Williams). On the other hand literary meaning of Arbuda is a lump or mass. According to the description given by Susruta. Arbudas are gradually increasing mass of big size, globular in shape, fixed with deeper structure, usually do not suppurate, giving occasional pain and can occur in any part of the body. It can involve Mamsa and Rakta due to vitiation of tridosa. Etiopathogenesis of Arbuda: It is based mainly on Dosis theory i.e. Vata, Pitta and Kapha. Further by Mithya Ahara and Vihara the different humors are vitiated involving different Dhatus (Mamsa, Meda, Rakta, etc). resulting in the prescription of Arubuda. Though vitiated "Dosa" are responsible for the development of Arbuda, almost all Ayurvedic texts have given maximum importance to Kapha. Susruta has mentioned that due to excess of Kapha, Arbuda does not suppurate which is considered to be the common and important factor for any growth in the body. Thus, it seems justified to postulate that excess of vitiated Kapha in the body might be responsible for the precipitation of cancer.³ Irritation and trauma may precipitate or activate the formation of Arbuda. Where, for the enlargement of external genitalia, local application of certain irritable medicines have been advised. More often improper use or misuse of those drugs i.e. Linga Vridhikara Yoga has led to the development of Mamsarbuda. According to Susruta, trauma is also considered to be another causative factor for the development of Mamsarbuda, whereas Vagbhata has described that whenever, there is excessive formation of Mamsa Dhatu it may lead to various pathological conditions,

such as Galaganda, Gandamala, Arbuda, Granthi and Adhimamsa. It indicates that Mithya Ahara and Mithya Vihara probably changes local or systematic biochemical factors including the haemodynamics leading to the origin of Arbuda.

CLASSICAL AYURVEDA AND CANCER

'Arbuda' is the Sanskrit word for tumor. According to Sushruta the three Doshas (Vata, Pitta and Kapha) when aggravated may develop a malignant tumor; especially aggravated Kapha and Vata Doshas. This affects the tissue, which might result in developing a malignant tumor.

This tumor will have the following features-

- a. Round
- b. Firm
- c. Causing mild pain
- d. Large
- e. Deeply rooted in the body
- f. Slow growth
- g. Showing no suppuration
- h. A swollen, fleshy growth

A malignant tumor does not suppurate because it contains an excess of Kapha and adipose tissue, thus forming firm little balls. Sushruta (The Sushruta Samhita is the major surgical text of Ayurveda, by the surgeon Sushruta. Ashtanga) describes 6 types of tumors, the first four are benign and can be successfully treated at an early stage with proper therapies. The last two tumors are malignant.

MALIGNANT TUMORS

Rakta Arbuda occurs when aggravated Doshas hamper blood vessels in their functioning, impeding the blood circulation as well. This leads to disturbances in the blood, comparable to the accumulation of toxins (ama) in the blood. These toxins (e.g. carcinogens) can be the cause of a tumor. When tumors develop in the blood vessels, their spreading through the blood- and lymphatic system will soon become a reality. This large spreading of tumors will make recovery extremely difficult. Symptoms of blood tumor: little fluid or pus accumulation (inflammatory signs) around the tumor, grows quickly, covered with small metastases and secretion of disturbed (vitiated) blood. This form is very difficult to cure.³

Mamsa Arbuda occurs when muscles get disrupted from fighting for instance. When from the punching the muscles show a swelling which is stony hard, painless, glossy, immobile without inflammatory signs of the same color as the surrounding, then this is the tumor. This form is more common in non-vegetarians. Mamsa Arbuda is extremely difficult to cure for the same reasons as Rakta Arbuda.⁴

THREE FORMS OF METASTASISING ACCORDING TO SUSHRUT

- a. Raktarbuda: When a tumor is surrounded by smaller tumors

- b. Adhyarbuda: Development of another tumor over the first tumor. Or when a tumor arises
- c. On a pre-existing site or near a primary tumor.
- d. Dviarbuda: When two tumors arise at the same time.⁵

Those tumors that cause large secretion of fluid in the surrounding tissue, are located in vital locations or channels (lymphatic system and blood vessel system) or tenaciously attached to the surrounding tissue are highly difficult to cure. Malignant tumors do not suppurate and do not exude fluid, blood or pus anymore. They are no longer removed by the body, grow quickly and cover a large area. They are caused by three vitiated Doshas and always affect muscle tissue, adipose tissue and blood.⁶

TRIGUNA AND CANCER

Not only the body functions but also the mental functions can contribute to the development of a tumor: the Triguna.

- i. Sattva (goodness, purity) harmonious, balanced mind or attitude, friendliness, calm,
- ii. Rajas (passion) dynamic mind, sometimes restless, forceful.
- iii. Tamas (ignorance) quite state of mind, sometimes slow and uninterested.⁷

When someone is blocked in his development for some reason, he may become frustrated. This will imbalance the mind and lead to all kinds of symptoms like hyperactivity, lethargy, indifference or even depression. The last three are mental attitudes Ayurveda refers to as “Tamasic”, the negative aspect of Tamas. Tamas has a strong resemblance with the Tridosha Kapha. When a chronic disease such as cancer develops, Tamas and Kapha can reinforce each other. Ayurveda considers psychotherapy as a meaningful part of the treatment. Health can only be attained through balancing body, mind and spirit.⁸

MODERN RESEARCH ON AYURVEDA AND CANCER

Modern research is being conducted to explore the anti-cancer effects of herbs and formulations described in classical texts and used by Ayurvedic physicians in clinical practice. Plumbago Rosea, Withania Somnifera, Semecarpus Anacardium, Achyranthes Aspera, Saraca Asoka, Hemidesmus Indicus, Pandanus Odoratissimus, Curcuma Longa, Tinospora Codrifolia, Commiphora Mukul and the list goes on.⁹

Varanadi Ghritam and Indukantam Ghritam are formulations that have been explored for their beneficial effects in cancer. The traditions of text and practice in Ayurveda continue to be explored for new leads to develop drugs for management of cancer. Vincristine and Vinblastine were harvested from the plant Vinca Rosea for the management of leukemia. This plant does not, however, figure prominently in the classical Ayurvedic texts. The numerous medicinal plants mentioned in Ayurvedic literature

have shown potential benefits in the management of cancer, but the preliminary findings have not been translated into potent medicines that can be effectively used at the point of care.

AAHAR (FOOD)

The diet plays special and importance role in country like India. We had a predominantly plantbased diet. Indian spices not only add the test aroma, flavor but also consumption of spices provides infinite health benefits. Systematic research revealed that following spices posses anti cancerous activity.¹⁰

1. Kesar (Crocus sativa) -crocetin a carotenoid has anti tumor activity.
 2. Haridra (Cucuma longa) -curcumin has proapoptotic and anti- proliferative actions.
 3. Lavanga (Syzygium aromaticum) -eugenol.
 4. Lashuna (Allium sativum) -organosulphur compounds has cancer preventive and tumorsuppressive effect.
 5. Methika (Trigonella foenum) -seed of fenugreek are cytotoxic in vitro to cancer cells.¹¹
 6. **Sunthi (Zinzibar officinale)** -extract has significant growth inhibitory effects in a spectrum of prostate cancer cells.
 7. **Kali marich (Piper nigrum)**- piperine found to antioxidant, anti- inflammatory and anti-cancer activities.
 8. **Jatiphala (Myristica fragrans)** -methanol extracts are effective in human leukemia T cells.
- Vihar (daily routine)**- It contains Dincharya, Rutucharyaand Aacharrasayan.
1. Dincharya-Aacharyaexplained how to follow a good conduct in a whole day. Brahma Muhurte utthithate(early morning wake up before sun rise), Anjankarma, Dhoompan, Natsya, Dantavishodhan, Gandushand Kawal, Karnatarpan, Snehaabhyanga, Sharirparimarjan.
 2. Rutucharyaor conduct according to season -there are six Rutuaccording to Ayurveda i.e. Shishir, Vasant, Grishma, Varsha, Sharad, Hemant.
 3. Adharaniya vega (non- suppression of urges) - for being healthy one should not suppress the natural urges there are thirteen non suppressive urges.
 4. Aachar rasayan-The concept of Rasayan has been evolved for improving the quality of life through various specialized procedures. Rasayan deals with all angles of health i.e. physical, mental, social, spiritual aspect. Aachar rasayanis Adravabhoottype of Rasayanin which no pharmaceutical measure is taken under consideration. It increases immunity of body and make mind fresh which is an essential factor for healthy life. With the knowledge of literature one will restrict himself from Pragyaparadhawhich is a factor among three major contributors, for ill health. Some factors of Aacharrasayanagiven in text are free from anger,

free from alcohol consumption, cleanliness, balance sleep, spiritualism etc.¹²

YOGA

Happiness and misery arise due to conduct of the Atma (soul), Indriya (sense organs), Mana(mind) and Indriya vishaya (sense objects) but when the mind is steadily concentrated to the self, both cease to exist due to non-initiation and a super natural power comes forth in the person, this state is known as yoga by the expert. In India, approximately 56% of cancer patient took recourse to alternative therapies, among these, yoga was the third most commonly accepted therapy.

Emotional suppression become mandatory to carry on with life this result in chronic imbalance that disturb homeostasis and promote cancer. It can be used for management of side effect, reduction of cost involved, avoid poor quality of life, minimize psychological ill health and reduce recurrences. Aasan, pranayam, meditation etc. are techniques to help the patient arrive at an internal mastery over the mind and Pranathat help in correcting the imbalance.¹³

SATVAVJAYA TREATMENT

It is also called as Aaswasanchikitsa. It is used as psychological therapy. Patient with cancer have to face treatment like chemotherapy and radiotherapy. Side effects of this therapy leads to patient fatigue, pain and permanent impairment of several organ system, which make patient enable to perform the daily routine activity. Emotional stress regarding diagnosis of cancer and its treatment also makes patient fearful. Fear of recurrence produce physical and psychological impairments result in depression, adjustment disorder, anxiety, mood disturbance, sadness, confusion and fear of future.¹⁴ Patient have to face financial stress due to lack of inadequate health insurance policy, loss of jobs and no support from the health care system. In such a case many of the preplanned situations are to be generated by physician and surrounding people so as to raise level of confidence in the patient and restraint the patient's mind from unwholesome objects. In such a situation recitation of mantras, auspicious act, an oblations, boost patients mind to cope the situation.

CONCLUSION

Application of principles of Ayurveda as Aahar (food), Vihar (routine), Yoga, Panchakarma, Samshaman, Satwavajaya, Rasayanthrapy, Satvrutta, Naisthiki chikitsa with modern treatment will definitely prove boon for them to improve quality of life while moving towards the end.

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