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## Diet and lifestyle for the prevention of the cancer care

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### ABSTRACT

Cancer is one of the major health problems around the globe and the number of cancer are also get larger day by day. In this 21st century 3 out 10 may get cancer, says WHO. There are several medicines available for the treatment of various types of cancer but no drug is found to be fully effective and safe. Ayurveda, the oldest Indian medicine system is known from very early times for preventing or suppressing various tumors using the natural medicine. Cancer was mentioned in Ayurveda as a Arbuda it is mentioned in detail by Acharya Sushruta. Ayurveda has mentioned various life-style carcinogens. A high fat diet, fast food, packed food, sedentary lifestyle, stress, alcohol and smoking are either causative or an aggravating factor (Nidan) in most of the cancer incidence. Aahar-Vihar mostly plays a decisive role in ancient healing method and theories. It often plays a role in modern society. However, 30-50 percentage of all cancer cases are preventable by a healthy diet and lifestyle in accordance with the world cancer research fund (WCRF) cancer prevention.

Key words: Cancer, Arbuda, Aahar, Vihar.

#### INTRODUCTION

Cancer is one of the most dreaded diseases of the 20<sup>th</sup> century and spreading further with continuous and increasing incidence in 21st century. Cancer is the second leading cause of death globally, accounting for an estimated 9.6 million deaths, or one in six deaths. in 2018. Between 30%-50% of cancer deaths could be prevented by modifying or avoiding key risk factors and implementing existing evidence-based prevention strategies. The cancer burden can also be reduced through early detection of cancer and management of

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patients who develop cancer.[1] Recently, a greater emphasis has been given towards the researches on complementary and alternative medicine that deals with cancer management. Several studies have been conducted on herbs. For example, Hartwell [2] has collected data on about 3000 plants, those of which possess anticancer properties and subsequently been used as potent anticancer drugs. [3] The word Cancer is derived from the Greek meaning 'CRAB' which was used in Medical sciences for long time as mere technical term 'CANKER' applied to eroding ulcers. W. R. Belt suggested that the terminology of cancer is used for its adherence with such obstinacy to the part i.e., like a crab and cannot be separated from each other. Earliest and foremost record could be seen in Atharva Veda, where the disease was nomenclature as "Apachit". In the later swelling at different places in the body.[4]

#### **CANCER AYURVEDIC CONCEPT**

According to the oldest companion of the Indian medicine science i.e. Charaka<sup>[5]</sup> and Sushruta Samhita<sup>[6]</sup> two well-known classics describe cancer as inflammatory or non-inflammatory swelling and

stated them as *Granthi* (minor neoplasm) or *Arbuda* (major neoplasm). In *Ayurveda* classics, *Vata*, *Pitta* and *Kapha* are mutually coordinate to perform the normal function of the body. In benign neoplasm *Vata*, *Pitta* and *Kapha* one or two of the three system get out of control and is not so much harmful because body is still trying to coordinate among these systems. In malignant tumors *Tridoshaja* are very much harmful because all three major bodily system lose mutual coordination and cannot prevent tissue damage. Resulting in deadly morbid condition.<sup>[7]</sup>

#### Classification

Ayurvedic classification of neoplasm depends on various clinical symptoms in relation to *Tridoshaj*.

- Group 1: Diseases that can be named as clear malignancy which include Arbuda and Granthi, e.g., Mamsarbuda (Melanoma) and Rakta Arbuda (leaukaemia), Mukharbuda (oral cancer) etc.
- Group 2: Diseases that can be considered as cancer such as incurable ulcer with e.g., *Tridosaj Gulmas* (abdominal tumors Like carcinomas of the stomach and liver or lymphomas).
- Group 3: Diseases with the possibility of malignancy, e.g. Visarpa (erysipelas), Asadhya Kamala (incurable jaundice) and Nadi Vrana (sinusitis).<sup>[8,9]</sup>

#### **Etiopathogenesis of Arbuda**

According to Ayurvedic principle the disease cannot be named on its own because it differs between persons in terms of illness clinical presentation and also the treatment required does pathogenesis in Ayurveda is explained on the basis of three *Doshaj* agony and bitter which is present in each and every cell is responsible for diagnosis and metabolism in human body the decrease in *Agni* is inversely proportional to the related tissue and therefore in *Aarbuda*. *Acharya Sushruta* has mentioned that due to excess of *Kapha*, *Arbuda* does not suppurate. [10]

Cancer originates due to metabolic crisis e.g., aggravating of *Vata* forces and suppression of the *Kapha* forces both interacting with one another

resulting in proliferation. However, the abnormal cancerous growth at a specific organ is managed by compensation from other part of body example -body weight loss (cachexia) *Sushruta* has proposed six stages in pathogenesis of all diseases but concept suits more to the pathology of tumor than pathogenesis itself.

- Sanchaya early stage of localized neoplastic changes
- Prakopa transformation of primary growth (metastatic tumor)
- 3. Prasara metastasis
- Sthansanshraya complete metastasis and secondary growth
- 5. Vyakta clinical sign and symptoms are expressed
- 6. *Bheda* Differentiation of growth occurs on basis of histopathology.<sup>[11]</sup>

### **Prognosis of cancer**

Based on the prognosis of the different types of *Arbudas* described in *Ayurvedic* text books they can be placed under two categories;

- Sadhya
- Asadhya

Most of the *Arbuda* including *Mamsarbuda*, *Raktaarbuda* and *Tridoshaj* of any site occuring in ear, nose, throat etc. are considered as *Aasadhya* (incurable). However, some of *Arbudas* are *Sadhya* which are most probably cyst, benign tumors or chronic inflammatory swelling.

#### **Prevention of Cancer**

Any practical solution in combating this dreadful disease is of paramount importance. Classical Ayurvedic texts have several references to cancer. Some terms used to describe the condition are general while others are much more specific. In Ayurvedic treatment of cancer, prevention is the key.

Acharya Charaka, described effective prevention for cancer. It includes maintain a healthy diet and lifestyle and avoiding exposure to known cancer causing

substances. It is prevented with healthy lifestyle and dietary measures i.e., smoking cessation, increased ingestion of fruits and vegetables, exercise, avoidance of direct exposure to sunlight, minimal consumption of meat, use of whole grain, use of vaccination and regular check-up.

Ayurveda way of lifestyle focuses on all of these, under the following headings;

- Prakritisthapan Chikitsa (health maintenance)
- Roganashani Chikitsa (disease cure)
- Rasayana Chikitsa (restoration of normal function)
- Naishthiki Chikitsa (spiritual approach).<sup>[12]</sup>

#### Prakritisthapani Chikitsa

It can include *Dincharya* and *Ritucharya* (daily regime) which maintain normal condition of *Vata, Pitta, Kapha.* i.e., *Yoga* (exercise), *Abhyanga* (massage), *Snana* (bathing) cleansing, meditation, appropriate work or study, three meals a day (*Aahar*), relaxing reading and sound sleep (*Nidra*) etc.

Scientific evidences are available emphasizing importance of *Dinacharya* in one's life.

#### Dantadhavana

It is advised to clean teeth & oral cavity early morning by herbs which are *Kashaya - Tikta- Katu Rasatmaka*. As these *rasas* are *Kaphahara* & *Keldaghna* they help in pacifying *Kapha Dosha*. So, in day to life it can be related as toothpaste which is *Madhura Rasatmaka* should be avoided as it will negate the main purpose of *Dantadhavana*. And thus, it will help to prevent oral cancer.

- Anjana Use of Sauveeranjana & Rasanjana is advised to maintain health of Eyes.
- Dhoomapana, Gandusha Dhoomapana is also indicated in Kaphavata Avastha by Katu - Tikta Kashaya Rasa Dravya mainly.
- Abhyanga Daily Abhyanga is advised as it is Jara-Shrama-Vatahara, Pushtikara, Tvachya, Sharir Dardhyakrita.

- Vyayama Vyayama should be done as Ardhashakti.
- Udvartana Udvartana is the application or rubbing of dry Choorna or powder on the skin externally. Udvartana is for Medoghna Twakprasadana action by Katu-Tikta-Kashaya.
- Rasa Dravya like Musta etc. as these are Kaphahara in nature.
- Snana Snana relieves stiffness, causes Vata Shamana. Many Panchakarma procedures are included in Dinacharya such as Nasya, Dhoomapana, Anjana etc. Inclusion of this Karma in daily regime specifies their importance in Prevention of diseases.
- Rejuvenating herbs and foods (Rasayana). [13]

#### Ritucharya

Seasonal diet and habit shift In Ayurveda, the knowledge of Ritucharya is a firsthand guide to the concept which describes the modes and stages of the development of diseases, with regard to the state of different Doshas - Vata, Pitta and Kapha in accordance with the changes in Ritu. A good understanding of it, is very much essential for early diagnosis and prognosis of any disease & for adopting preventive and curative measures. It is to be known that disharmony in the Doshas - Vata, Pitta and Kapha results in Roga (disease), and aim of Ayurveda is to maintain this harmony. With changes in diet and lifestyle, there are changes in the state of Tridoshaj, resulting in disharmony, causing lifestyle diseases. Ritu acts as Vyanjaka or Nimittakarana in the aggravation and manifestation of disease.[14]

#### Roganashani Chikitsa

A number of studies from all over the world are pointing that some herbs have anti-cancer properties (Kaefer and milner, 2008). The scientist got these herbs which are used in Ayurveda help reduce cancer preventing herbs are discussed here.

Garlic (Allium sativum)[15]

Ashwgandha (Withania sominifera)[16]

Basil (Ocimum basilium)[17]

Ginger (Zingiber officinalis)[18]

Turmeric (Curcuma longa)[19]

Green tea (Camellia sinensis)[20]

Anti-cancer activity of cow urine[21]

Aleovera, saffron and tomatoes (solanum lycopersicum)<sup>[22,23,24]</sup>

#### Aachar Rasayana

It is behavioral conduct i.e., Sadvritta following it acts as Rasayana on our body & mind. In Charak Samhita Chikitsasthana Rasayanadhyaya, Aachar Rasayana has been explained which is nothing but the mental hygiene to be followed by definite methods to lead an ideal ethical way of living. Such physical & behavioral conduct definitely leads to a life with Rasayana effect.

Achara Rasayana may act as a Rasayana by 3 paths;

- Improves the personality
- Improves social relations
- Improves physical health

The concept of prevention is not strictly relegated to *Ayurveda*. Changing your lifestyle include more live foods, vegetables also reducing stress, getting adequate amount of sleep and exercise, reducing your toxic burdens and fortifying the body with quality supplements are all good practices for health and vitality.

#### Naishthiki Chikitsa

A continuity of aliments is checked by treatments that are conductive to the continuity of happiness. The state of equilibrium of *Dhatus* is not disturbed nor is the imbalanced state bought to normalcy without some causative factors. It is the causative factors which determine the equilibrium or imbalance of the *Dhatus*. So, physician treats the diseases pertaining to the past present and future. Absolute eradication of miseries is obtained by the elimination of desires. Desires are the root cause of all miseries. A silk worm provides for itself suicidal threads. So does an

ignorant person. Bound by worldly miseries, he provides for himself desires arising out of the various objects. A wise person, who obtains from the objects of sense, considering them as dangerous as burning fire, does not subject himself to any wishful acts and attachments with the result the miseries never overcome him.<sup>[25]</sup>

#### **DISCUSSION**

According to Ayurveda classics, 'Agnimandhya' is the main cause of all diseases. Agni plays an important role in the prevention abnormal cells i.e., cancer cells. Viruddhaahar (fish and milk), Vishmashana (irregular time and unbalanced food), Adhyashana (eating food when before meal is undigested), frozen food and irregular habits are not recommended ay Ayurveda and these are responsible factors (nidan) for cancer. Scientists are making their best efforts to fight with cancer. Along with medicine, healthy & balanced diet and living style is also advised. It is equally important for prevention of cancer. Aahar (diet) and Dincharya (lifestyle) will help to maintain a healthy body, which can itself reduce the risk of many cancer. Changing your life style to include vegetables, fruits, organic, grass fed meats and reduce uses of processed food is a part of it. In addition, adequate amount of sleep, yoga, meditation, reduces stress, Sadvritta (good habits) and quality supplements are all good practices for good health.

Multiple herbs processing great potential for cancer care. Which can use as a medicine as well as in food i.e., tomatoes, aleovera, ginger, cow urine, basil, garlic, turmeric. They have anticancer properties. We can prevent cancer by mere changes in dietary and lifestyle.

#### **CONCLUSION**

The review shows that as mentioned in *Ayurveda* dietary and lifestyle are played an important role in the prevention and minimize the risk of cancer. We concluded that by making dietary and lifestyle efforts can prevent the risk of cancer and boost our ability to fight for cancer.

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