



## AYURVEDIC CONCEPT OF CANCER

<sup>1</sup>\*Dr. Pratibha Kondibarao Waghmare and <sup>2</sup>Dr. Pradip Kashinath Kumbharwad

<sup>1</sup>Assistant Professor, Shalakya Tantra Department, Government Ayurvedic College, Vazirabad, Nanded, Maharashtra 431601.

<sup>2</sup>Assistant Professor, Agadtantra Department, Siddhakala Ayurved Mahavidyalaya, Sangamner Pimparane Road, Sangamner Kh, Maharashtra 422605.

**\*Corresponding Author: Dr. Pratibha Kondibarao Waghmare**

Assistant Professor, Shalakya Tantra Department, Government Ayurvedic College, Vazirabad, Nanded, Maharashtra 431601.

Article Received on 29/05/2023

Article Revised on 19/06/2023

Article Accepted on 09/07/2023

### ABSTRACT

According to WHO, cancer is a leading cause of death worldwide, so cancer needs a serious concern because of its increasing incidence with high mortality and morbidity rate. In Ayurvedic literature, concept of cancer was not found, but the diseases having the similar signs and symptoms to those of cancer are described by *Acharya Charaka* and *Acharya Sushruta* as inflammatory or non-inflammatory swellings and mentioned either as *Granthi* (Minor neoplasm) or *Arbuda* (Major neoplasm). According to the Ayurvedic concept cancer arises when there is an imbalance between the *vata*, *pitta* and *kapha doshas* which are important for normal body function. It is a condition where some of cells become toxic, grow uncontrollably and the toxic cells also cause harm to adjacent normal cells. In benign neoplasm, one or two *doshas* are out of control and it is not too harmful because the body is still trying to coordinate among these *doshas*. In malignant tumors, all three *doshas* (*tridoshas*) get out of control and lose mutual coordination between them. *Tridoshas* cause excessive metabolic crisis resulting in proliferation, that causes tissue damage which leads to degeneration and depletion, resulting in deadly morbid condition. Taking this into consideration, an ayurvedic approach focusing on strengthening digestion, eliminating toxins, reducing tumor growth and improving tissue metabolism is useful. An Ayurvedic approach to cancer supportive care focusses on restoring equilibrium, building strength and rejuvenation.

**KEYWORDS:** Cancer, *Doshas*, *Granthi*, *Arbuda*.

### INTRODUCTION

The word Cancer is derived from the Greek meaning 'CRAB' presumably because a cancer cell adheres to any part that it seizes upon in an obstinate manner like a crab. Which was inspired by large number of prominent veins surrounding a growth suggesting a picture like claws of a crab.

Cancer is a hyper proliferative disorder that involves transformation, deregulate of apoptosis, proliferation, invasion, angiogenesis and metastasis. Cancer is a deadly metastatic disease that occurs when some of our body cells become mutant and start growing uncontrollably and can spread to the entire body depending upon the consequences. The causes behind development of cancer are existing stressful lifestyle and habitats involving alcohol consumption, smoking, unhealthy foods, sedentary activities, stress, anxiety, etc. are some of the main reasons so that cases of cancer are increasing day by day.

According to Ayurveda in '*Charaka*' and '*Sushruta Samhitas*' cancer is described as inflammatory or non-

inflammatory swelling and mentioned either as '*Granthi*' (minor neoplasm) or '*Arbuda*' (major neoplasm).

According to Ayurveda, imbalance of the three *doshas* (*Vata*, *Pitta*, & *Kapha*) is the root cause of all the diseases and also the cause of Cancer. A lot of factors are responsible for the vitiation of these three *doshas*, out of which important factors being faulty dietary regimen, improper diet pattern. (taking food before digestion of previous food, or not taking food during hunger), disturbed sleep (awakening at night and sleeping during daytime), suppression of natural urges (stool, urine, hunger, thirst etc.), lack of exercise, and mental constraints like anxiety, tension, stress, depression, etc. Stress, anxiety and depression of the modern world make the mind more unstable which triggers the *doshas* imbalance causing incidence of cancer higher.

### AYURVEDIC CONCEPT OF CANCER

According to *Acharya Sushruta*, the aggravated *Doshas* are accumulated in a particular localised area of the body. There, they cause excess aberration in muscular tissues (*mamsa pradooshana*) and which leads to, circular-stable-mild painful-larger-broad based-non

suppurative growths are caused which are gradually maturing in nature seen in this damaged area. Such muscular growths will have broader (wider) base and often the base (site of origin) is not visible too. Such abnormal, prominent growths are termed as cancerous mass (*Arbuda*).

### SIGNS AND SYMPTOMS OF ARBUDA ACCORDING TO AYURVEDA BENIGN GROWTH

*Vruttam* (round)

*Sthiram* (immovable)

*Mandaruja* (slightly painful)

*Mahanta* (big size)

*Analpa mulam*

*Chiravruddhi* (slowly increasing)

*Apakam* (nonsuppurative)

### MALIGNANT STAGE/METASTASIS

*Adhyarbuda*

*Dviarbuda*

### SIGNS AND SYMPTOMS OF CANCER ACCORDING TO MODERN

#### Early signs of Cancer

When cancer begins, it invariably produces no symptoms. Signs and symptoms only appear as the mass continues to grow or ulcerates causing local symptoms.

#### General signs appear after spread of cancer

##### These may include

1. Change in bowel or bladder habit: Long-term constipation, diarrhoea, or a change in the size of the stool may be a sign of colon cancer.
2. Unintentional weight loss: This happens most often with cancers of the pancreas, stomach, oesophagus, or lungs.
3. cancers of the liver or kidney can cause a persistent fever of unknown origin; Less often, fever may be an early sign of cancer, such as blood cancers like leukaemia or lymphoma.
4. Being excessively tired
5. A sore that doesn't heal (changes to the skin)
6. Unusual bleeding from any part.
7. A thickness or Lump (Tumour)- Thickening or lump in the breast or other parts of the body
8. Indigestion & trouble swallowing
9. Persistent headache which is not relieved by any treatment may be symptom of brain tumour.
10. An obvious change in shape and size of any part.

### SAMPRAPTI OF ARBUDA

According to the Ayurveda, cancer arises when there is an imbalance between the three *doshas* of our body. It is a condition where some of the cells become toxic, grow uncontrollably, and the toxic cells also cause harm to adjacent normal cells. Cancer in each person differs according to the person's exposure to pathogens and genetic constitutions which make each of them to react differently to the same diet.

The factors responsible for the vitiation of *doshas* are given below as-

**a. Vata aggravating factors:** excessive intake of bitter, pungent, astringent, dry foods and stressful conditions.

**b. Pitta aggravating factors:** excessive intake of sour, salty, fried foods and excessive anger.

**c. Kapha aggravating factors:** excessive intake of sweet, oily food and sedentary nature.

The factors responsible for the vitiation of dhatus are given below as-

**d. Rakta aggravating factors:** Fried and roasted foods, alcoholic beverages, sour fruits, Excessive anger or severe emotional upset, sunbathing or working under hot climatic conditions.

**e. Mamsa aggravating factors:** excessive intake of foods like meat, fish, yoghurt, milk and cream, sleeping during the day and overeating are some of the causes for pathogens invading the fatty tissues.

**f. Meda aggravating factors:** excessive intake of oily foods, sweets, alcohol consumption and sedentary lifestyle.

Thus, pathogenesis in Ayurveda is explained on the basis of *Tridoshas*. *Pitta* or *Agni*, which is present in each and every cell and is responsible for digestion and metabolism in human body. In *arbuda*, the decreased state of *dhatwagni* (deranged metabolism) will result in excessive tissue growth because *agni* is inversely proportional to related tissue.

*Vata* can be correlated with the catabolic phase of growth whereas *kapha* to the Anabolic phase. Cancer originates due to a metabolic crisis, i.e. aggravation of *vata* forces and suppression of *kapha* forces, both interacting with one another resulting in proliferation.

### PATHOGENESIS OF TUMOUR (SHATAKRIYAKALA)

There are four stages of tumour growth-

1. Malignant changes in one cell (transformation).
2. Growth of transformed cell.
3. Local invasion.
4. Distant metastasis.

*Acharya Sushruta* has proposed six stages in the pathogenesis i.e. *Shatakriyakala* of all diseases. So that *Shatkriyakala* of tumour explain below such as-

1. **Sanchaya:** early stages of localized neoplastic changes occur. i.e. Hyperplasia, dysplasia and in situ cancer.
2. **Prakopa:** transformation of primary growths into metastatic tumours.
3. **Prasara:** metastasis. i.e. cancer cells invade surrounding tissue and enter blood and lymph.
4. **Sthana samsraya:** complete metastasis and secondary growth.
5. **Vyakti:** clinical signs and symptoms are expressed.
6. **Bheda:** the stage where differentiation of growth occurs on the basis of histopathology.

In benign neoplasm *Vataja*, *Pitaja* or *Kaphaja* one or two of these three *doshas* are out of control and is not too harmful because the body is still trying to coordinate among these *doshas*. Malignant tumours (*Tridosaja*) are very harmful because all the three *doshas* lose mutual coordination and thus cannot prevent tissue damage, resulting in a deadly morbid condition.

According to the description given by *Sushruta*, *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. Due to vitiation of *tridosas* causes involvement of *mamsa* and *rakta dhatu*. Irritation by vitiation of increased *dosha* and trauma may precipitate or activate the formation of *Arbuda*. According to *Sushruta*, trauma (*Mushti Prahar*) is also considered to be causative factor for the development of *Mamsarbuda*.

#### Non-suppuration of *Arbuda*

Though vitiated "*Tridosha*" are responsible for the development of *Arbuda*. *Sushruta* has mentioned that due to excess of *Kapha*, *Arbuda* does not suppurate, which is considered to be the most 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.

### AYURVEDIC TYPES OF ARBUDA

#### Types of *Arbuda* according to *Dosha*

1. *Vataja Arbuda*
2. *Pittaja Arbuda*
3. *Kaphaja Arbuda*
4. *Tridoshaja Arbuda*

This indicates that, there are probably four major *doshas* which can play a key role in precipitate malignant growth in the body after vitiation.

#### Types of *Arbuda* according to *Dhatu* (tissue or cells)

*Dhatu*s is included in *Arbuda*, i.e, in three types of *dhatu*s, according to the description of *Sushruta* in *NidanaSthana*.

##### 1. *Raktaja Arbuda*

*Pitta* predominance and Vitiated *doshas* occupy the blood (*rakta*) and vessels (*sira*). There, they compress and contract the localised area and hence an elevated bigger muscular tumour is developed. This growth often bleeds from its periphery by mere touch or abrasion. Such a condition is called *Raktarbuda*. Which further leads to severe emaciation and chronic anaemia.

##### 2. *Mamsaja Arbuda*

*Vatika* predominance, sarcoma is considered as *Mamsaja Arbuda*. Due to Constant trauma or damage in any muscular part of the body leads to vitiation of localised area and Further, these tissues undergo instant transformation and quick multiplication of abnormal

cells result into a tumour. This is usually painless, unctuous, vivid coloured, non-suppurative, palpated like stone and stable in nature.

##### 3. *Medoja Arbuda* (Fatty tissue)

If such a growth is observed over the adipose tissues, it is termed as *Medo arbuda*.

#### Types of *Arbuda* according to sites

The *Arbuda* may be present at any place or body tissue. The sites for eyes, ears, nose, oral cavity are separately described as, for example, *Vartma-Arbuda* (eye lid), *Karnarbuda* (ear), *Taluarbuda* (Palate), *Ostharbuda* (Lip), *Mukharbuda* (Buccal mucosa) and *Sirarbuda* (Head and brain tumors).

#### Types of *Arbuda* according to prognosis

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

1. *Sadhya*
2. *Asadhya*

*Asadhya* (incurable) are considered to be most of the *Arbudas*, including *Mamsarbuda*, *Raktarbuda*, and *Tridoshaja arbuda* from any location in ear, nose, throat etc. However, some *Arbudas* are also called *Sadhya*, the most likely cyst, benign tumours and inflammatory tumours.

In an interval or time, *Sadhya Arbuda* may evolve to *Asadhya Arbuda* may spread to other spots that could be referred to as the metastatic stage, or else from one stage to the next. This pathogenesis has been described as "*Adhyarbuda*" or "*Dwiarbuda*". This most likely indicates the recurrence and metastasis of tumors in a distal place.

**1. *Adhyarbuda*:** Development of another tumor over the first tumor or when a tumor arises on a first or pre-existing site.

**2. *Dwiarbuda*:** when two tumors arise at the same time, those tumours, which cause great secretions of liquid in the surrounding tissue, are placed either in vital positions, channels or attached to the surrounding tissue (the lymphatic system and the blood vessel system). i.e metastasis.

#### *Asadhya Vrana* (malignant ulcers)

According to *Acharya sushruta*, almost all of the various *Asadhya Vrana* clinical presentations could be considered under malignant ulcers. *Sushruta* indicates that these ulcers are chronic in nature and show multiple solid fleshy masses with different types of discharge, exophytic growth may present as a cauliflower like irregular/ flat. At times, such ulcers also have some general symptoms, such as painful breathing, anorexia, chronic cough, cachexia, etc. indicating the stage of cancer or cancer spread elsewhere.

**Diseases that can be regarded as malignant**

This especially includes those discomforts that are labeled *Asadhya* together with certain malignancy- like manifestations. These are *Mamsaja Ostha*, *Alasa*, *Mamsa Kacchapa*, *Galaugha*, *Tridosaja Gulma*, *Asadhya Galaganda*, and *Asadhya Vrana*, etc.

**Mamsaja Ostha:** It is an incurable lip discomfort that occasionally develops heavy and thick fleshy ulcerative lesion such as exophytic lesion.

**Alasa:** due to the vitiation of *Rakta* and *Kapha*. There is a deep swelling under the surface of the tongue It gradually grows in size, discharges fishy smells and destroys the surrounding structures. It looks like tongue Cancer.

**Mamsa Kacchapa:** Because of *Kapha*'s vitiation, the palate develops a big swelling that becomes painful, increases progressively and is not cured. It looks like a hard palate tumour.

**Galaugha:** This disease also develops as a result of vitiation of *Rakta* and *Kapha*, similar to other illnesses. A large swelling occurs in the throat during this disease which blocks passages of the oesophagus and trachea, resulting in patients having difficulty swallowing or breathing, which is fatal to the patient. All these symptoms can be presented by malignant growth in the oropharynx.

**CONCEPT OF BENIGN AND MALIGNANT TUMOUR ACCORDING TO AYURVEDA****Benign tumours**

Benign tumour cells grow only locally and cannot spread by invasion or metastasis.

When detected in an early state, benign tumors are curable as *Vata* closed the blood vessels due to their drying, pushing and contracting characteristics. This prevented the tumour from rooting deep into the tissues and is of very limited growth and nutrition. However, they are much more severe and harder to cure if these tumors are in the bloodstream. Pain and tumor mobility are important characteristics of successful recovery. Whenever a tumor is fully attached and has begun to grow, it is difficult to treat.

**Malignant tumours**

Malignant cells invade neighbouring tissues and enter into blood vessels, lymphatic system and metastasize to different sites. E.g *Tridoshajarbuda*, *Raktarbuda* and *Mamsarbuda*.

**The Development of Malignant Tumors**

A malignant tumor occurs when the benign tumor suddenly grows too strongly and has roots in the tissue that are compatible with increased *Kapha Dosh*. Malignant tumors are no longer supportive and fluid, blood, or pus no longer exudes. They are not removed from the body any more, grow fast and cover a large

area. Three vitiated *doshas* cause them and always affect the musculoskeletal, adipose and blood tissue. The benign tumors (*Granthi*), which may convert into malignant tumor (*Arbuda*). The *Granthi* are curative, painful and mobile in the blood vessels. However, when *granthi* is painless, large, stationary and located in the vital areas of the body then it is very difficult to cure *Granthi*.

**CONCLUSION**

Cancer is a disorder of cell growth characterised by uncontrolled, uncoordinated and undesirable cell division.

Malignant tumours can be identified and described in the ancient literature. There are several references to cancer in Classical Ayurvedic texts. *Arbuda* is the most special term for malignant cancer and the metastasis or spread of cancer between parts of the body is indicated by *Dviarbuda*. It seems to be of *Vata-Kapha* origin with regard to *Samprapti* for the formation of tumours. For uncontrolled growth and defective cell divisions *VataKapha doshas* are responsible. The general predominance of benign tumors is *Kapha*. However, when *Pitta* is also damaged in malignancies then condition in nature becomes *Sannipatika* and then benign tumour converted into malignant tumour. In *Arbuda's dhatus* are *Rakta*, *Mamsa* and *Meda*, respectively, which have a prevalence of *Pitta*, *Vata* and *Kapha*. The description of *Adhyabuda* or *Dviarbuda* suggests tumour recurrence to distant locations.

**REFERENCES**

1. Ravidatta Tripathi, Charaka Samhita, part 2, chaukhamba Sanskrit pratisthan, reprint-2013, chikitsasthan adhyaya 12, shwayathu chikitsa adhyaya, shloka no. 81-87.
2. Kaviraj Dr. Ambikadatta shastri, Sushruta Samhita, chaukhamba Sanskrit sansthan Varanasi, reprint – 2016, Nidansthana adhyaya 11, Granthi Apachi Arbuda galagandanam adhyaya, shloka no. 3-9, 13-22.
3. Kaviraj Dr. Ambikadatta shastri, Sushruta Samhita, chaukhamba Sanskrit sansthan Varanasi, reprint – 2016, Chikitsasthana adhyaya 18, Granthi Apachi Arbuda galaganda chikitsa adhyaya, shloka no. 3-21, 29-42.
4. Kaviraj Atrideva Gupta, Astanga Sangraha vol.2, Krishnadas academy, Varanasi, chaukhamba press, Varanasi, reprint-1993, Uttarsthana Adhyaya 34, Granthi Arbuda Shlipada Apachi Nadi Vidyaniya Adhyaya, Shlok no. 1-17.
5. Kaviraj Atrideva Gupta, Astanga Sangraha vol.2, Krishnadas academy, Varanasi, chaukhamba press, Varanasi, reprint-1993, Uttarsthana Adhyaya 35, Granthyadi Pratishedha Adhyaya, Shlok no. 1-17.