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## Review On Integrative Cancer Management

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### Abstract

Cancer is a group of diseases in which there is an abnormal growth of cells that proliferate in an uncontrolled way and in some cases, metastasis (spread) occurs. Cancer is the second most common cause of death in the Western world, after cardiovascular disease. Established modern treatment includes surgery, chemotherapy and radiotherapy etc. With varied prognosis and known untoward effects .In *Ayurveda*, cancer can be correlated with *Granthi* (benign or malignant neoplasm) or *Arbuda* (malignant or major neoplasm). *Ayurvedic* treatment includes Dietary regimens, *Aushadhi Chikitsa-Dhatwagni Chikitsa*, *Rasayan Chikitsa*, *Shodhan Chikitsa* and Agni karma etc. In this research article, we have tried to compile the scattered information about cancer from various *Ayurvedic Samhita*, modern text books and published articles.

**Keywords:** Cancer, Tumor, Arbuda, Granthi, *Rasayan Chikitsa*.

### Introduction:

Cancer is characterized by uncontrolled proliferation, tissue invasion, anaplasia and metastasis. According to estimates, there were 14,61,427 incident cases of cancer in India in 2022 (about 100.4 incidences per 100,000 people). Cancer is predicted to strike one in nine Indians at some point in their lifetime. For both men and women, the most common cancer sites were the lung and breast, respectively. The most common type of childhood cancer (0–14 years old) was lymphoid leukaemia (29.2% in boys and 24.2% in girls) [1].

Cancer occurs because of malfunction of genes involved in cell proliferation, cell to cell interaction

and those involved in maintaining the integrity of DNA. [2]

**Pathology**-It reveals cellular abnormalities such as greater number of cells than in normal tissue, increased size, a higher nuclear to cytoplasmic ratio and a higher proliferation rate. The cells may present in abnormal locations or metastasis from tissue of origin. [3]

### Aetiology Of Cancer [4]

There are various etiological predisposing factors responsible for cancer which are listed below in

**Table-1:** Various aetiological factors of Cancer

<b>Chemical Carcinogen</b> Environmental carcinogen	Aflatoxin –present in food stuff infected by fungus Aspergillus causes hepatocellular carcinoma.
<b>Lifestyle</b> Smoking ,Tobacco	Lung ,larynx, oral cavity, oesophagus, kidney,Bladder and Pancreas cancer
Alcohol	Hepatocellular carcinoma
Salt pickled fish	Nasopharyngeal carcinoma
<b>Occupational carcinogens</b>	
Benzidine & 4-amino biphenyl	Bladder cancer
Vinyl chloride	Hemangiosarcoma
<b>Drugs</b> <b>Alkylating Agents-</b> <b>Cyclophosphamide</b> ,nitrosoureas	Acute myeloid leukaemia
Cyclosporin	Non Hodgkin lymphoma(NHL),Kaposi sarcoma
Nonsteroidal estrogen	Vaginal carcinoma, breast cancer testicular carcinoma
Oral contraceptives & tamoxifen	Endometrial carcinoma
<b>Infection</b>	
HPV (Human Papillomavirus)	CA cervix,anal carcinoma & skin cancer
EBV(Epstein Barr virus )	Burkitt's Lymphoma , nasopharyngeal carcinoma
HBV(Hepatitis B virus )&HCV (Hepatitis C virus)	Hepatocellular carcinoma
H-pylori	Gastric carcinoma ,LYMPHOMA
Schistosoma haematobium	Bladder cancer
<b>Immunity</b>	
Immunosuppression	NHL,Hodgkin's Disease ,Kaposi sarcoma
<b>Radiation</b> <b>Hereditary predisposition</b>	Acute and Chronic myeloid leukaemia, cancer of lung,bladder,thyroid,bone,sarcoma of soft tissue,skin cancer

**Screening** – Early detection of cancer is not possible due its asymptomatic nature in some cases. So ,before they spread, screening for malignancy is required. It helps to increase curable rate by loco-regional treatment alone. <sup>[5]</sup>

**Table.2.** Screening method of different malignancies

Malignancy	Method of Screening
Breast cancer	Mammography
Cervical cancer	Cervical smear cytology
Prostate cancer	PSA(Serum prostate specific antigen)
Colorectal cancer	Single flexible Sigmoidoscopy, Fecal occult blood test.

**Clinical Assessment**–The clinical manifestation includes both local and systemic features. Local symptoms are due to the mass effect of local tissue while systematic symptoms are as a result of metastases or non –metastatic presentation of malignant disease. During assessment, malignancy site ,pathology,patient general and systemic condition (respiratory, cardiovascular), co morbidity (related with age, tobacco abuse, alcohol abuse), extent of disease and available treatment is taken in consideration. <sup>[6]</sup>

Local symptoms include pain,lump, skin abnormality, ulcer etc.Systematic features include weight loss, fatigue, anorexia, hypocalcaemia, prothrombic tendency,neuropathies,myopathies, hormonal effects, etc.

**Investigation:** Routing blood investigation, ultrasound,HIV,HPV,Biopsy(excision,endoscopic, needle i.e.FNAC), X-ray,Tumour imaging and sampling by direct vision as Endoscopy (Sigmoidoscopy , colposcopy smear), CT scan,MRI, PETscan, Bone scan,Bone marrow. <sup>[7]</sup>

**Immunohistochemistry Markers** - S-10, Cam5.2, CEA (Carcinoembryonic Antigen), CA-125, ER (Estrogen Receptor, Her-2).<sup>[8]</sup>

**Tumour markers in blood**- CEA, CA-125, AFP (Alpha –Fetoprotein), LDH (Lactate dehydrogenase), PSA (Prostate –specific antigen), HCG (Human chorionic gonadotropin ).<sup>[9]</sup>

**TNM Classification**–Cancer is staged by the TNM system [10]. T- Extent of primary tumour (T0, T1, T2, T3-Increases in primary tumour size) N -Extent of regional lymph node involvement (N1, N2, N3-Increases in involvement) M-Presence or absence of metastasis (M0, M1)

### Prevention of cancer<sup>[11]</sup>

1. Primary Prevention helps to decrease risk of normal asymptomatic individuals. e.g. Cessation of smoking for lung cancer.
2. Secondary prevention helps to decrease the progression of preneoplastic process by treatment of carcinoma. Early detection of cancer by special screening method. breast cancer, carcinoma of cervix etc.
3. Tertiary intervention includes treatment and chemoprevention of secondary malignancy.
4. Avoid influence of alcohol, tobacco smoking- chewing, chemical carcinogens etc.
5. Diet should be rich in vegetables and fruits. Decreasing total fat intake and taking monounsaturated vegetable fat reduces cancer risk. E.g. prostate cancer, colorectal carcinoma.
6. Chemoprevention –use of drugs for prevention of cancer. e.g. Beta-carotene shows regression of leukoplakia.
7. Surgery has a role in patients predisposed to cancer. e.g. bilateral mastectomy in patients with familial breast cancer.

### Treatment –

During management of cancer patients, patients must be informed about the diagnosis, the stage and prognosis with treatment options.

**1. Excision** –Most solid cancers are cured with surgical excision. E.g. breast cancer, lung, colorectal cancer etc.<sup>[12]</sup>

**2. Radiotherapy**-In radiotherapy, ionizing radiation done with radiation from a radioactive isotope or by high energy radiation beams mostly X-ray. There are 3 methods

- Teletherapy- done from a distance by a linear accelerator
- Brach therapy-direct application on to or into a tumour e.g. head and neck cancer
- Intravenous injection of radioisotope e.g. 131-iodine for cancer of thyroid, 89-strontium for bone metastases from prostate cancer [13].

**3. Chemotherapy**– In chemotherapy, various cytotoxic agents are used which have intracellular effects. These drugs are not specially designed to target malignant cells and also have side effects so sometimes drugs of different classes are used in

combination. Here, drugs are given intravenously every 3-4 weeks, about 4 and 8 cycles of treatment are usually given in total.<sup>[14]</sup>

- E.g. Alkylating agents- Melphalan, Cyclophosphamide
- Antimetabolites –Bleomycin, Mytomycin
- Antimetabolites-Methotrexate, 5-fluorouracil
- Mitotic spindle poisons- Vincristine, Daunorubicin, Etoposide
- Miscellaneous- Cisplatin, Procarbazine, Carboplatin
- Combination - CMF (Cyclophosphamide, methotrexate, 5-fluorouracil)
- Cisplatin and 5-fluorouracil, Carboplatin and paclitaxel

**4. Hormonal treatments**–In certain cancer, like breast cancer, prostate cancer, hormonal therapy reduces the proliferation of cancer cell and increase their loss through apoptosis leading to tumour shrinkage. E.g. Progesterone, Anti –oestrogen (tamoxifen), ovarian ablation, testicular ablation etc.<sup>[15]</sup>

**5. Biological treatments-**

- Immunological treatment –As the patient immune system can alter the natural history of malignancy. Research proved that interferons are active in melanoma and lymphoma. They are also beneficial as adjuvant (after surgery and chemotherapy respectively). E.g. Rituximab is an antibody against the common B-cell antigen CD20. The monoclonal antibody trastuzumab is effective in advanced breast cancer.
- Biophosphonates-They inhibit osteoclast function, reduce bone pain, and also prevent skeletal complications in advanced breast cancer and myeloma. [16]

**6. Molecular biology** develops certain drugs having potential to target cancer cell more selectively, with reduced toxicity to normal tissue. E.g. Gefitinib and imatinib are used in many solid tumours such as breast and lung cancer. [17]

**Ayurvedic Perspective:**

In Ayurveda, according to ‘ Charka’ and ‘ Sushruta Samhita’ cancer is described as an inflammatory or non-inflammatory swelling which mentioned either as ‘*Granthi*’ (minor neoplasm) or ‘*Arbuda*’ (major neoplasm). [18]

Acharya Sushruta has well explained *Granthi* and *Arbuda* in Sushruta Samhita. According to Sushruta, the fundamental cause of major neoplasm is the pathogens that affect all parts of the body. Sushruta mentioned the sixth layer of the skin as ‘ *Rohini*’ (epithelium) and injury to this layer caused by lifestyle errors, unhealthy foods, poor hygiene and bad habits results in vitiation of *Doshas* , which leads to the manifestation of tumors. [19,20]

There are some factors causing vitiation of *Doshas* . [21].

- a.** Stressful Situations, an excessive consumption of bitter, pungent, astringent, and dry foods are aggravating factors for *Vata Doshas* .
- b.** Extreme consumption of fried, sour, and salty meals, as well as extreme anger, are also exacerbating factors for *Pitta Doshas* .

**c.** Excessive consumption of sugary, fatty foods and sedentary lifestyle are aggravating factors for *Kapha Doshas* .

**d.** Excessive consumption of foods high in acid or alkali constitutes an exacerbating factor for *Rakta Doshas* . Sour fruits, wine, fried and roasted food, alcoholic beverages are a few examples.

**e.** Excessive consumption of foods high in exudates, such as meat, fish, yogurt, milk, and cream, is one of the aggravating causes for *Mamsa*. One of the ways that bacteria invade the fatty tissues is through sedentary behaviors, including sleeping throughout the day and overeating.

**1. Granthi-Benign tumors:**

**Samprapti (Pathogenesis):**

Due to unsalutary lifestyle and food habits, *Vata* and other *Kapha*-related *Doshas* become aggravated, vitiate the muscle, blood, and fat tissues and result in a hard, round swelling known as *Granthi* (tumor). [22]

**Lakshana (Signs and symptoms):**

Acharya Sushruta described *lakshana* according to vitiation of *Doshas* as follows. [23]

**Table- 3:** *Lakshana* of *Granthi* according to vitiation of *Doshas* .

Types	Cause	Lakshana(Sign and symptoms)
<i>Vataja Granthi</i>	Due to vitiation of <i>Vata Doshas</i> .	Swelling is hard, black in color, enlarged like the bladder, exudes clear blood, pain like cutting, stretching, vibrating.
<i>Pittaj Granthi</i>	Due to vitiation of <i>Pitta Doshas</i> .	Swelling is red, slightly yellowish in color, exudes warm blood in large quantities, pains such as burning, very warm sucking and as burnt by fire.
<i>Kaphaj Granthi</i>	Due to vitiation of <i>Kapha Doshas</i> .	Swelling is cold to touch, not discolored, slight pain but severe itching, grown big like a stone, develops slowly, exudes white thick pus.

Types	Cause	Lakshana(Sign and symptoms)
<b>Medoja Granthi</b>	Due to vitiation of <i>medas</i> (fat)	Swelling is unctuous, very big in size, mild pain but severe itching, exudes fatty liquid resembling paste of sesame or ghee.
<b>Siraja Granthi</b>	In weak person, due to excessive physical exercises, <i>Vata</i> gets aggravated	Squeezing and compression of <i>sira</i> , painless, immobile, raised circular Granthi.

## 2.Arbuda -Malignant Tumor/Cancer/Carcinoma

### **Samprapti (Pathogenesis) :**

Due to indulgence of unsalutary food habit, *Doshas* get aggravated. These aggravated *Doshas* cause vitiation of the muscle tissue and form swelling which is round, static (immovable), big in size, deep rooted, growing slowly and not ripening (forming pus). This is called *Arbuda*.<sup>[24]</sup>

### **Types of Arbuda with Lakshan:**

*Vataja*, *Pittaj*, *Kaphaj*, *Raktaj* (blood), *Mamsaja* (muscles) and *Medoja* (fat) *Arbuda* are types of *Arbuda*. Their symptoms are similar to corresponding types of *Granthi* (benign tumors).

### **Raktaj Arbuda:**

*Raktaj Arbuda* is formed due to vitiation of *Doshas* associated with blood and getting localized in the veins (blood vessels), producing squeezing and contraction in them, and giving rise to swelling which increases in size quickly. It Exudes vitiated blood continuously.<sup>[25]</sup>

### **Mamsaja Arbuda :**

Due to injury to the body part, the muscle gets vitiated which gives rise to stone-like swelling which is painless, the same color of the body, not forming pus and non-movable, produces *Mamsarbuda*. This *Mamsarbuda* is incurable.

### **Sadhya –Asadhyata: (Prognosis):**

Curable: *Vataja*, *Pittaj*, *Kaphaj* *Arbuda* may be considered as Benign tumors. Incurable: *Raktaj* = Blood borne, *Mamsaja* = Sarcoma and *Medoja* = Fatty tissues born; these may be considered as Malignant tumors. Further *Arbuda* are classified as per sites of occurrence such as;

- *Talwarbuda*- Tumor occurring in Palatal region
- *Nasaarbuda*- Tumor occurring in Nasal region
- *Netrarbuda*- Tumor occurring in Eye lid region
- *Medhrarbuda*- Tumor occurring in Penile region
- *Galarbuda*- Tumor occurring in Throat region
- *Mamsarbuda*- Tumor occurring in Muscles

### **Metastasis: Adhyarbuda and Dwandwarbuda**

*Adhya Buda* refers to *Arbuda* that develop in pre-existing sites, while *Dwiarbuda*, or metastasis, refers to many related growth types that occur in different regions one after the other.<sup>[26]</sup> Other

Malignant diseases: These comprise, in particular, the pains associated with the *Asadhyata* diagnosis as well as specific indications that resemble cancer. *Mamsaja Kacchapa*, *Galaudha*, *Tridosaja Gulma*, *Asadhyata Galaganda*, *Lingarasa*, and *Asadhyata Vrana* are a few examples of these.<sup>[27]</sup>

**Mamsaja Osth:** This condition causes constant pain on the lips, which can sometimes lead to ulcers and a thick, heavy weight.

**Alasa:** Due to vitiation of *Rakta* and *Kapha*, there is a profound swelling beneath the tongue's surface. It resembles epidermoid tumors of salivary glands.

**Mamsa Kacchapa:** A large swelling of the palate occurs due to vitiation of *Kapha* which becomes painful, grows, and cannot be treated. From the appearance, it appears to be a hard palate tumor.

**Galaudha** also develops due to the vitiation of *Rakta* and *Kapha*. This disease is characterized by a massive swelling in the throat that obstructs the trachea and esophagus, making it fatal for sufferers to breathe or swallow.

**Granthi Chikitsa (Treatment mentioned in Sushruta Samhita)**

In the unripe stage of *Granthi* (benign tumors), the treatments indicated for *shopha* (inflammatory swelling) is advocated such as *Vimlapana*, *Avsechan*, *Upanaha*, *Shodhana*, *Ropana* etc. Similarly, different types of *lepa* application, medicated decoction are used for treatment according to vitiation of *Doshas*.

**Table- 4: Granthi Chikitsa mentioned in Sushruta Samhita**

<p><b>Vataja Granthi Chikitsa</b></p>	<p>Decoction - <i>Dashmoola</i> with <i>sneha</i>  <i>Lepa- Gojiva - Tinospora cordifolia, Tailapatra (Musali) - Chlorophytum borivilianum, Rohini (katukarohini) - Picrorhiza kurroa</i>  <i>Amrita - Tinospora cordifolia, Bharngi - Clerodendrum serratum, Shoynaka - Oroxylum indicum, Bilva - Aegle marmelos, Aguru - Aquilaria agallocha, Arka - Calotropis procera, Aragvadha - Cassia fistula cleaned with the decoction of bilva, Arka and aragvadha.</i>                      Healing of wound- Medicated oil prepared with <i>Rasna, Vidanga, Yashtimadhuka</i> and <i>kṣira</i> (milk).<sup>[28]</sup></p>
<p><b>Pittaj Granthi Chikitsa</b></p>	<p>Bloodletting - Application of leeches                      Decoction - <i>kakolyadi Vargas</i> with sugar  <i>Lepa- Barks of madhuka, jambu, arjuna and vetasa</i>                      Incision and drainage of pus, cleaning with decoction of <i>panchvalkala</i>,                      Healing-paste of <i>Tila</i> and <i>Yashtimadhuka</i>.<sup>[29]</sup></p>

<p><b>Kaphaj Granthi Chikitsa</b></p>	<p><i>Lepa-Paste of aragvadha, kakananti, pindaphala (tikta alabu), arka, bharngi, karanja, and madana</i>                      Excision of ripe tumor                      Healing-medicated oil prepared with <i>vidanga, patha and rajani</i>.</p>
<p><b>Medoja Granthi Chikitsa</b></p>	<p>Excision by scraping with a sharp instrument.                      Cleaning with <i>gomutra</i> and a paste of <i>Tila, suvarachika, haritala</i>                      Healing - <i>Karanja, gunja, inguda and gomutra</i>.<sup>[30]</sup></p>

**Arbuda Chikitsa (mentioned in Sushruta Samhita): Treatment of malignant tumor/ carcinoma**

Like *Granthi Chikitsa*, in *Arbuda Chikitsa* different *lepa* application, decoction, bloodletting excision etc. have adopted according to vitiation of *doshas*.

**Table- 5: Arbuda Chikitsa mentioned in Sushruta Samhita**

<p><b>Vataja Arbuda Chikitsa</b></p>	<p>Fomentation – Poultice with seeds of <i>karkaruka, ervaruka, narikela, priyala</i>                      Bloodletting by sucking horn                      Decoction of <i>Vata</i> mitigating drugs, milk and sour liquids (<i>sauviraka</i> etc)                      .<sup>[31]</sup></p>
<p><b>Pittaj Arbuda Chikitsa</b></p>	<p>Sudation done with warm poultices and mild purgation                      Lepa-paste of <i>sarjarasa, priyangu, pattanga, rodhra, anjana (srotonjana), aragvadha, gojihva mixed with honey, decoction of yastimadhu</i><sup>[32]</sup></p>

<b>Kaphaj Arbuda Chikitsa</b>	Excision with caustic alkali, fire (thermal cautery) and shastra Bloodletting, cleaning with decoction of leaves of <i>jati and karavira</i> . Healing -medicated oil prepared with <i>bharingi, vidanga, patha and triphala</i> . <sup>[33]</sup>
<b>Medoja Arbuda Chikitsa</b>	First, fomentation then incision. Cleaning of wounds with Shodhan dravya. Suturing of wounds. Dressing with <i>Karanja taila</i> with honey. <sup>[34]</sup>

#### **Arbuda punarutpatti (Recurrence of tumors/metastasis) :**

Those *Arbuda* (malignant tumors) in which remnants of tumor tissue remain, they develop again quickly; hence they should be excised without leaving any residue; as any residue left will kill the patient just like fire.<sup>[35]</sup>

#### **Conservative Ayurvedic Therapy for Cancer management :**

Ayurveda plays a very important role in cancer patients, including curative, palliative, preventive, and supportive effects. *Ayurvedic* medications work through a variety of pharmacokinetic pathways to enhance patients' quality of life. *Roganashani Chikitsa* (disease cure), *Rasayan Chikitsa* (restoration of normal function), and *Naishthiki Chikitsa* (spiritual approach). *Prakritisthapani Chikitsa* are used to maintain the health of cancer patients [36,37]. In *Rasayan Chikitsa*, drugs which are used have proved for their antioxidant properties. *Panchakarma* procedures (*Vaman, Virechan, Raktamokshana, Nasya, Basti*) help to remove the vitiated *doshas* from cancer patients. In debilitated, weak cancer patients, *Shodhan Chikitsa* is not possible where *Shaman Chikitsa* has been used for maintaining health.

Certain *Agad* formulation is used for treatment of cancer patient like *Vilwadi* and *Kalyanaka* having radio toxicity protection. *Ajithagadam* have Nephro toxicity protection.<sup>[38]</sup> It has been proved that *Snehana*, or the traditional use of different therapeutic oil preparations a week or ten days before the commencement of chemotherapy or radiation therapy help to reduce the harmful effects of such treatments.<sup>[39]</sup>

Certain *Ayurvedic* herbal preparations have been scientifically proven for their anti-cancer properties. These preparations not only help in healing but also reduce the side effects along with complications associated with cancer patients [40].

E.g. *Aloe vera - Aloe barbadensis miller, Berberis aristata - Berberis aristata, Curcuma longa - Curcuma longa (Turmeric), Bacopa monnieri - Bacopa monnieri, Tagar - Valeriana wallichii (Indian Valerian), Chitrak - Plumbago zeylanica, Ashwagandha - Withania somnifera, Amla (Aamalki) - Phyllanthus emblica, Bhallatak - Semecarpus anacardium, Guduchi - Tinospora cordifolia, Musta - Cyperus rotundus (Nutgrass), Pippali - Piper longum (Long Pepper), Haritaki - Terminalia chebula (Chebulic Myrobalan).*

A combination of *Curcuma longa, Ashwagandha - Withania somnifera, - Tinospora cordifolia, and Azadirachta indica* in the proper ratios and phytoactive concentrations has proven immuno-enhancing effect.<sup>[41,42]</sup>

It is hypothesized that biological fluids such as blood, urine, pleural effusions, etc., contain an anti-cancer agent that can cause regression of cancer and delay the process of carcinogenesis.<sup>[43,44]</sup>

In the view of eight types of urine of animals being mentioned in *Ayurveda*, some researchers advocate *Shivambu Chikitsa* (auto urine therapy) with variable claims on result. Similarly, use of cow urine (*Gomutra*) therapy for cancer treatment has also proved beneficial in few research studies as having no side effects.<sup>[45,46]</sup> Several research studies have shown the use of mantras, faith, prayers, and meditation to treat cancer.<sup>[47,48]</sup> These therapies improve health through mindfulness, breathing exercises, postures, movements, and

relaxation. Further, there is a scope to study Ayurvedic modalities, including Yoga, *langhan* and *Panchkarma*, for their effects on mitochondria in cancer. *Ayurvedic Chikitsa* such as *Yukti-vyapashraya*, *Sattva-vajaya* and *Daiva-vyapashraya* also have significant opportunities for integrative research, management and complications in cancer [49,50]

### Discussion:

In this review research article, we tried to compile the information of Cancer from various modern surgical texts in view of definition, pathophysiology, signs and symptoms and available treatment as per stages of disease. We had also well explained the *Ayurvedic* perspective of cancer such as *Arbuda*, *Granthi* in relation to its classification, pathogenesis, sign and symptoms and treatment. In Modern, various treatment modalities have been used for cancer such as Chemotherapy, Surgery, Radiotherapy. In *Ayurveda*, this treatment can be correlated with *Bheshaj*, *Shastra*, *Agni karma Chikitsa* which are well explained by *Acharya Sushruta* in *Sushruta Samhita*. These treatment modalities are principally like today's prevalent treatment of Cancer. This documented information will help research scholars to understand the integrated approach towards Cancer management.

### Conclusion:

This review article explains the Cancer description in ancient *Ayurvedic* as well as modern medical science. In *Ayurveda*, Cancer and its symptoms are classified on the basis of *Doshas*, *Dhatu*, tumor site and treatment is also adopted accordingly. Various studies have been proved that many of the herbs like *Ashwagandha*, *Triphala*, *Shatavari* etc. are used for treatment of various cancers which not only helps in healing but also reduces side effects of Chemotherapy and Cancer associated problems. *Ayurvedic* treatment also described *Shodhan-Shaman Chikitsa*, *Panchkarma*, *Rasayan Chikitsa*, dietary regimen, *Agni karma*, etc. which plays an important role in the prevention and minimize the risk and side effects of therapy and prolong the life span of cancer patient. Similarly, *Ayurvedic*

literature also helps to understand the clinical features of tumor forming cancer in early stages. Further, more research, clinical study should be done to identify safe and effective anticancer drugs in *Ayurveda* and modern medical science to prevent the major cause of death of Cancer patients.

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