



DASHANG AGAD IN PREVENTION, CARE AND CURE OF CARCINOMA

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Abstract:

Cancer, one of the deadly challenges, drastically in 21st century, has now officially become the most dangerous killer in the world according to the World Health Organization. It is a disease in which some of the body's cells grow uncontrollably and spread to other parts of the body by destroying normal body tissue. The causes may be gene mutations inherited from the parents or gene mutations caused due to other forces like exposure to many toxic substances such as benzene, arsenic, formaldehyde, asbestos and radiations, which are known to be potent

carcinogens. No one can deny the fact that cancer is related to adversary of modernization and at once pattern of irregular and stressed life dominated by unhealthy lifestyle. In the pathology of the cancer, the toxins retained in the body for long period, and on getting favorable condition it causes disease related to particular tissue where they get accumulated. Even in the first stage as well as in the following stages of cancer, *Ayurveda* can help to retard the progression of the disease and also help to improve the quality of life. There several treatment modalities available based on the type of cancer, mainly chemotherapy and radiation therapy. In chemotherapy, several chemicals used to damage the cancer cells, while in radiation therapy x rays are used, which damages the DNA of the cancer cells causing them to die. But other types of fast growing healthy cells such as blood and hair cells also can be damaged along with the cancer cells, causing adverse reactions and side effects. With the help of different therapies and formulations of *Ayurveda*, the adverse effects can be reduced as well as it assists the body in its recovery process. One such *Agad* formulation explained by *Aacharya Vagbhat* in *Ashtang Hruday Uttartantra* is *Dashang Agad*. It is a Herbo mineral formulation containing ten ingredients, it is traditionally used in *Ayurveda* for managing *Keeta Damsha* (insect bites) and other toxic conditions and the majority of its ingredients have been proved for possessing anticancer activity by various research works. Hence *Dashang Agad* can be an appropriate choice of medicine in the management of cancer. In this paper *Dashang Agad prayoga* in cancer is discussed in detail.

Keywords: *Ayurveda, Agad, Cancer, Dashang agad.*

Introduction:

Cancer is a generic term for a large group of diseases that can affect any part of the body. One defining feature of cancer is the rapid creation of abnormal cells that grow beyond their usual boundaries, and which then invade adjoining parts of the body and spread to other organs, the latter process is referred to as metastasis. Metastasis are the primary cause of death from cancer (1). Cancer a leading cause of death worldwide, accounting for nearly 10 million deaths in 2020 (2). Though heredity plays its role in causing cancer that includes only 5% of cancer cases, non -heredity factors such as lifestyle, food, level of physical activity, personal hygiene, environmental pollution are the major causing factors (3). In this modernized era, people are exposed to different kinds of toxic substances such as ultraviolet, ionizing radiation, asbestos, arsenic, smoke, tobacco, formaldehyde etc. through the air, water, land, environment, food etc. Long term exposure to poisons in lower doses leads to cumulative deposition in body tissues without producing any symptoms, however on getting favorable conditions they manifest as dreadful disease like cancer.

Dushivisha is one of the unique concept of *Ayurveda*. When any *Visha* either plant origin, animal origin, or synthetic origin retained in the body after partial expulsion, they get collected inside the body. They become less potent after digestion or by the administration of *Vishaghna Aushadhi* stays in the body for a long period without producing any grave symptoms. It slowly vitiates *Dosha* and *Rasa Raktadi Dhatus*. The tissue where the toxins

get deposited causes grave diseases like cancer in that tissue. Due to its *Alpa Veeryata*, *Kapha pradhanata*, and *Aavrana* it does not cause sudden death. The same pathology is seen in cancer. After long-term exposure to carcinogens, *Rasa Raktadi Dhatus* get vitiated and causes mutation of cells. There are several treatment modalities available mainly chemotherapy and radiation therapy causing adverse reactions and side effects. In *Ayurveda* different *Agad* are explained. *Agad* is referred to as an antidote for poisoning or a mixture of antitoxic medications and certain antioxidant, immunomodulator, or hepatoprotective substances make up the Herbo mineral or polyherbal formulation. A role of *Agad* (Antidote) in cancer prevention has been proved for possessing anticancer activity by various research works. *Dashang Agad* is one of such formulation explained by *Acharya vagbhat* in *Ashtang Hruday Uttartantra*. It is used for *Keeta Damsha* i.e. *Jangama Visha* and if it is retained in the body for long term act as *Dushivisha*. *Dushivisha* and cancer have similar mechanism of action. So, we can use *Dashang Agad* in prevention, care and cure of cancer.

Aim and Objective:

Aim - To explore the role of *Agad* (*Dashang Agad*) in the prevention and management of cancer through the *Ayurvedic* concept of *Dushivisha*.

Objective - 1. To analyze Cancer, in light of *Dushivisha* in the Present scenario.

2. To study *Dashang agad* as prevention and cure of cancer.

Material and Methods: This review has done with an intention to provide an overview on *Dushivisha* - Cancer correlation and anti-cancerous property of *Dashang Agad*. The data were collected from *Ayurveda* authentic texts, scientific journals and through the electronic media.

Clinical Features: Most of the clinical features of *Dushivisha* and Cancer are similar which are tabulated as below:

Table No.1 Symptoms of *Dushivisha*

<i>Ayurvedic Literature</i>	Symptoms	Reference
<i>Charak Samhita</i>	<i>Kitibh</i> , <i>Kotha</i> (skin disorder), <i>Pran-nasha</i> (Death)	C.S.Chi.23/31
<i>Sushrut Samhita</i>	<i>Atisara</i> (Diarrhoea), <i>Twaka Vaivarnya</i> (depigmentation of skin), <i>Mukha Daurgandhya</i> (foul smell from mouth), <i>Virasta</i> (nausea), <i>Trishna</i> (thirst), <i>Murchha</i> (syncope), <i>Vaman</i> (vomiting),	S.S.K.2/27,30-32

	<i>Swarvaikrutya</i> (hoarseness of voice), <i>Dushyodar</i> (ascites), <i>Dhatukshaya</i> (weakness), <i>Vishamjwara</i> (fever), <i>Shukra Kshaya</i> (oligospermia), <i>Annamada</i> (nausea), <i>Avipaka</i> , <i>Arochaka</i> (Anorexia), <i>Mandala</i> (skin blisters), <i>Hasta paad shotha</i> (oedema on extremities) etc.	
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Table No.2 *Dushivisha Dhatugat symptoms* (S.S.K.2/29)

<i>Dhatu</i>	<i>Dushivisha Symptoms</i>
<i>Rasa</i>	<i>Aruchi</i> (Anorexia), <i>Ajirnya</i> (Indigestion)
<i>Rakta</i>	<i>Kushta</i> (Skin diseases), <i>Visarpa</i> (Herpes zoster)
<i>Mansa</i>	<i>Mansarbuda</i> (Sarcoma)
<i>Meda</i>	<i>Medoarbud</i> (Fatty tissue mass)
<i>Asthi</i>	<i>Adhidantadi vikara</i>
<i>Majja</i>	<i>Tamodarshana</i> (Faintness)
<i>Shukra</i>	<i>Klebya</i> (Infertility)

Cancer general signs and symptoms - Heavy night sweats or fever, anorexia, vomiting, feeling more tired than usual, unexplained bleeding or bruising, unexplained pain or ache, unexplained weight loss, unusual lump or swelling anywhere on your body, skin changes, nail changes, sore that won't heal etc.

Management:

For the management of cancer, several treatment modalities available like surgery, chemotherapy, radiotherapy, immunotherapy, gene therapy, etc. Despite the availability of a wide choice of treatment chemotherapy and radiotherapy are considered as the most superior among all. A wide range of chemicals are used to kill the cancer cells through chemotherapy and high doses of radiation x rays are used in radiation therapy to damage the DNA of the cancer cell, thereby it kills the cancer cells and shrinking tumors. They have their beneficial effects and side effects (4). So, to minimize the side effects of the treatment and to improve the quality of life in cancer patients, an integrated approach of the treatment with principles of Ayurveda may be beneficial. In the *Samhitas* of *Ayurveda*, different treatment principles like *Vamana* and *Virechana* are mentioned and *Dashang Agad* is one

of the *agad* formulations specifically told in the management of *Keetavisha* and other toxic conditions. It is a Herbo mineral formulation containing ten ingredients (5).

Table No.3 Ingredients of *Dashang Agad* (6)

Drug	Latin Name	Family	Part used
<i>Vacha</i>	<i>Acorus calamus</i> Linn.	Araceae	Rhizome
<i>Hingu</i>	<i>Ferula asafoetida</i> Linn.	Apiaceae	Resin
<i>Vidanga</i>	<i>Embelia ribes</i> Burm	Myrsinaceae	Fruit
<i>Saindhavam</i>	Rock salt	-	-
<i>Gajapippali</i>	<i>Scindapus officinalis</i> Schott.	Piperaceae	Fruit
<i>Patha</i>	<i>Cyclea peltate</i> Linn.	Menispermaceae	Root
<i>Prativisha</i>	<i>Aconitum heterophyllum</i> Wall	Ranunculaceae	Root
<i>Sunthi</i>	<i>Zingiber officinale</i> Rosc.	Zingiberaceae	Rhizome
<i>Marich</i>	<i>Piper nigrum</i> Linn.	Piperaceae	Fruit
<i>Pippali</i>	<i>Piper longum</i> Linn.	Piperaceae	Fruit

Table No.4 Ayurvedic Pharmacodynamic Properties

Drug	Rasa	Guna	Virya	Vipaka	Prabhava	Doshaghnata
<i>Vacha</i> (7)	<i>Katu, Tikta</i>	<i>Laghu, Tikshna</i>	<i>Ushna</i>	<i>Katu</i>	<i>Medhya</i>	<i>Kapha Vataghna</i>
<i>Hingu</i> (8)	<i>Katu</i>	<i>Laghu, Snigdha</i>	<i>Ushna</i>	<i>Katu</i>	-	<i>Kapha Vataghna</i>

Vidanga (9)	<i>Katu, Kashaya</i>	<i>Laghu, Ruksha</i>	<i>Ushna</i>	<i>Katu</i>	<i>Krimighna</i>	<i>Kapha Vataghna</i>
Saindhavam (10)	<i>Lavana</i>	<i>Shita, Ruksha</i>	<i>Shita</i>	<i>Madhura</i>	-	<i>Tridoshghna</i>
Gajapippali (11)	<i>Katu</i>	<i>Laghu, Snigdha</i>	<i>Anushnashita</i>	<i>Katu</i>	-	<i>Kapha Vataghna</i>
Patha (12)	<i>Tikta</i>	<i>Laghu, Tikshna</i>	<i>Ushna</i>	<i>Katu</i>	-	<i>Tridoshghna</i>
Prativisha (13)	<i>Tikta, Katu</i>	<i>Laghu, Ruksha</i>	<i>Ushna</i>	<i>Katu</i>	-	<i>Tridoshghna</i>
Sunthi (14)	<i>Katu</i>	<i>Laghu, Snigdha</i>	<i>Ushna</i>	<i>Madhura</i>	-	<i>Kapha Vataghna</i>
Maricha (15)	<i>Katu</i>	<i>Laghu, Tikshna</i>	<i>Ushna</i>	<i>Katu</i>	-	<i>Vata Kapha ghna</i>
Pippali (16)	<i>Katu</i>	<i>Laghu, Tikshna</i>	<i>Anushnashita</i>	<i>Katu</i>	-	<i>Kapha Vataghna</i>

Table No.5 Karma of ingredients of Dashang Agad

Drug	Karma
Vacha (7)	<i>Mootrajanana, Shothaghna, Sangyaasthaapana, Deepana, Pachana, Aakshepahara Dravya.</i>
Hingu (8)	<i>Vedanaasthapana, Deepana, Panchana, Mutrajanana, Shothaghna, kandughna, krimighna Dravya</i>
Vidanga (9)	<i>Krimighna, Rakta Shodhaka, Shoolaghna, Vedanasthapana, Varnya, Shothahara, Udarashoola, Kushtaghna, Aadhmanahar Dravya</i>
Saindhavam (10)	<i>Rochana, Deepana, Mutrala, Chhedana Shoola and Vibandhaghna, Kapha Nissaraka Dravya</i>

Gajapippali (11)	<i>Vedanasthapana</i> . It indicated in <i>Vatavyadhi, Jwara, Kamala, Pleeha vriddhi, Rasayana</i> .
Patha (12)	<i>Vishaghna, Shothahara, Vranashodhana and Vranaropana, Daha prashamana, Mutrala, Deepana, Pachana, Kandughna, Kusthaghna Dravya</i>
Prativisha (13)	<i>Kaphahara, Shothahara, Vedanahara, Deepana, Pachana, Jwaraghna. Raktashodhaka dravya</i> and indicated in <i>Atisara, Kasa, and Swasa</i> .
Sunthi (14)	<i>Shothahara, Vedanahara, Vatanulomana, Prashamana Shoola, Rakta Shodhaka, Aama Pachaka, Srotorodhahara Dravya</i>
Maricha (15)	<i>Pachana, Deepana, Vataanulomana, Shothahara, Srotasashodhana, Pramathi Dravya</i>
Pippali (16)	<i>Krimighna, Shothahara, Vedana sthapana, Yogavaahi, Rasayana Dravya</i> . It is indicated in <i>vaatavyaadhi, jwara, kamala and pleeha vriddhi</i>

***Dashang agad* and cancer:**

The majority of the ingredients of *Dashang agad* have been proven for their anticancer activity through previous research works.

1.Vacha : The anti-cancer properties of *A. calamus* and/or its main bioactive phytochemicals asarone alpha (α)-and, beta (β)-asarone and related mechanisms based on in-vitro and in-vivo experimental evidences are follows:

Table No.6 In-vitro effect of *A. calamus* and/or its bioactive phytochemicals asarone alpha (α)-and, beta (β)-asarone) on human cancer cell lines.

Cell lines	Treatment	Target/Possible molecular events	Reference
Colorectal cancer (HT29 and SW480 cells)	(β)- asarone (0,10,30 and 100 nM)	Decrease in the cell proliferation (MTT assay) Induces cell senescence (SA-B-Gal activity.) Increase in the levels of lamin B1, as well as p53, p21 and p15.	(17)

Gastric adenocarcinoma (AGS cells) Fibroblast (HSKMC cells)	Alcoholic extracts of A. calamus (15,30,60,120,240 and 480 ug/ml)	Anti proliferative effects (MTT assay). Cell cycle arrest at G1 phase. Inhibition of formation of tube-like structures confirming anti-angiogenic property. (Tube formation assay).	(18)
Prostate cancer (LNCaP cells)	Ethanol extract of A. calamus (250,500 and 750ug/ml)	Decrease in the cell viability (XTT assay). Induces apoptotic cell death. Decrease in VEGF mRNA expression.	(19)
Cervical cancer (HeLa cells) Adenocarcinoma (A549 cells)	Green silver nanoparticles synthesized from A. calamus (25,50,75,100,125,150,175 and 200 ug/ml).	Anti-proliferative effect (MTT assay). Apoptotic cell death. Nuclear changes as fragmentation and condensation.	(20)

Table No.7 In-vivo anti-cancer effect of *A. calamus* and/or its bioactive phytochemicals asarone (alpha) and beta (B)-asarone.

Model/Animal used	Treatment	Targets/Effects/possible molecular events.	Reference
LoVo cancer xenograft model (Nude mice)	(β)-asarone (50mg/kg/d b.w.; p.o.)	Suppression of the tumor volume. Apoptosis as confirmed by fragmentation of DNA in the growth. Inhibited tumors (TUNEL assay).	(21)
Diethylnitrosamine (DEN)-induced hepatocellular carcinoma (HCC) (wistar Albino rats)	(β)-asarone (25 ug/kg/d b.w.; p.o.)	Decrease in the level of serum liver biomarkers (ALT, AST, ALP, TB and DB) Decrease in the levels of cancer biomarkers (DNA, RNA and AFP).	(22)

By doing in-vitro and in-vivo studies using various models; the mechanism underlying cancer chemo-prevention of *A. calamus* and/or its bioactive phytochemicals asarone variation of all kinds of cancer hallmarks. These includes regulation of cell proliferation and cell cycle arrest, induction of apoptosis, inhibition of angiogenesis as modulated via different signal transduction pathways.

2. Hingu: Tumor reducing activity of extract of asafoetida was studied by Unnikrishnan and kuttan (23) in mice transplanted intraperitoneally with Ehrlich ascites tumor. Asafoetida extract inhibited two stage chemical carcinogenesis induced by Croton oil and 7,12 - dimethyl benzaanthracene on mice skin with considerable reduction in papilloma formation. It indicates the potential use of asafoetida as anti-cancer agents as well as anti-tumor promoters.

In 2015, panwar et al (24) investigated the chemo preventive potential of different doses of *F. asafoetida* oleo-gum-resin on 1,2, -dimethylhydrazine induced rat colon carcinogenesis. The study revealed that asafoetida supplementation attenuates 1, 2-dimethylhydrazine induced deleterious effects in the rats. The minimum dose of asafoetida (10mg/100g) exhibited more prominent effect (as it continuously influenced all the tested biochemical parameters.) and can be used as promising chemo preventive agent against colon carcinogenesis.

3. Vidanga: Recently, Embelin, recognized as a non-peptidic, cell permeable small inhibitor of the X- linked inhibitor of apoptosis protein(XIAP), has garnered significant attention for its anti-cancer activity. It demonstrates various anti-cancer mechanisms, such as apoptosis induction, cell cycle arrest and autophagy in different cancer types. Additionally, it modulated several signal transduction pathways, including NF-KB, P13kinase/AKT, and STAT3, effectively inhibiting the proliferation of diverse cancer cell lines.

Table No.8 In-vitro studies of Embelin against cancer

Type of cancer	Model using cell lines	Assay	Results	Reference
Breast cancer	MCF-7 MDA-MB-231	MTT	Decrease metastasis	(25)
Pancreatic cancer	MIA PaCa-2 HPAF-11	MTT	Increase apoptosis Decrease proliferation	(26)
Colorectal cancer	HCT 116	EMSA	Decrease IL-6/STAT3	(27)
Bladder cancer	T24 5637	CCK-8	Decrease P13/AKt Increase apoptosis	(28)
Prostate cancer	LNCaP C4-2cell	MTT	Decrease proliferation Decrease cell growth.	(29)

Table No.9 In-vivo studies of Embelin against cancer.

Type of cancer	Animal models	Doses	Results	Reference
Breast Cancer	Nude mice Xenograft models of MDA-MB-231 cell	10mg/kg	Decrease tumor volume.	(30)
Hepatocarcinoma	Wistar rats (DENA)	50mg/kg	Decrease tumor volume.	(31)

			Decrease metastatic nodules.	
Pancreatic cancer	C57BL/6mice	50mg/kg	Decrease metastasis. Decrease tumor volume.	(32)
Colorectal cancer	C57BL/6mice	50mg/d/kg	Decrease tumor growth. Decrease proliferation.	(27)
Prostate cancer	A thymic nu/nu mice xenograft model of C4-2cell.	10mg/kg	Decrease tumor volume. Decrease cell growth.	(33)

4. Saindhavam: Rock salt is a natural supplement that can provide health benefits. One of the main health benefits of rock salt is the large number of naturally occurring minerals found within the supplement. Crystallized rock salt contains 84 of the 92 trace elements currently identified in science. Many of these minerals, such as calcium and magnesium, are vitally important to normal organ function within the body. By providing all the essential trace elements, rock salt greatly improves the immune system. An improved immune system can play a significant role in combating cancer by identifying and destroying cancer cells. This can lead to better outcomes, including slowed cancer growth, reduced tumor burden, and potentially even complete cancer eradication. (34)

5. Gajapippali: The ethyl acetate and methanol extract from the fruits of *S. officinalis* possesses an antitumor activity, which is confirmed by the brine shrimp lethality bioassay, four human carcinoma cell lines (HL60, K-562, MCF-7, HeLa) and the rodent model of cancer, carried out by the method described by Mayer et al. (35)

6. Patha: Anti-cancer activity - The *C. pareira* contain stropone - isoquinoline alkaloid, named pareitropone, which showed potent cytotoxic activity. A new alkaloid, Cissamparein where is obtained from *C. Pareira* has reproducible inhibitory activity against human carcinoma of the nasopharynx carried in cell culture. (36)

Anti - tumor activity - The extract (primarily proteins and polysaccharides) inhibited tumor growth in the dose dependent fashion when administrated orally. At the highest dose tested, 200 mg/kg/day, tumor growth was inhibited by roughly 70% subcutaneous or intraperitoneal administration at 50 mg/kg/day also inhibited tumor growth by over 70 %. (37)

7. Prativisha: Certain studies have explored the potential anti-cancer properties of *Aconitum heterophyllum*. Its alkaloids have shown cytotoxic effects against various cancer cell lines, indicating possible anti-cancer activity. Nevertheless, further research is necessary to evaluate its safety and efficacy for cancer treatment. (38).

8. *Sunthi*: Recently, ginger has been widely investigated for its anti-cancer properties against different cancer types, such as breast, cervical, colorectal and prostate cancer. The potential mechanisms of action involve the inhibition of proliferation and the induction of apoptosis in cancer.

Table No.10 In-vitro studies of *Sunthi* against cancer.

Constituent	Study type	Subjects	Dose	Potential mechanisms	Reference
6-gingerol	In vitro	HeLa human cervical adenocarcinoma cells.	60, 100 and 140 uM	Decreasing the levels of cyclinA, cyclinD and cyclin E1. Increasing the expression of caspase; Inhibiting the mTOR signaling pathway. Inhibiting cell growth.	(39)
10-gingerol	In vitro	Human and mouse breast carcinoma cells.	50, 100 and 200 uM	Reducing cell division. Inducing S phase cell cycle arrest and apoptosis.	(40)
6-gingerol, 10-gingerol, 6-shogaol & 10-shogaol	In vitro	PC-3 human Prostate cancer cells.	1, 10 and 100uM	Inhibiting prostate cancer cell proliferation; Downregulating the expression of MRP1 and GST π .	(41)
Ginger extract	In vitro	HT29 human colorectal adenocarcinoma cells.	2-10 mg/ml	Upregulating the caspase 9 gene; Downregulating KRAS, ERK, Akt and Bcl-xL. Activating AMPK	(42)

9. Marich: piperine and piperidine extracted from black pepper have been reported to have several anti-cancer properties. Often these two products act similarly to inhibit the survival, growth and differentiation of cancer cell lines via. several pathways like ROS generation, intrinsic and extrinsic caspase - mediated apoptotic pathway, inhibition of cancer cell migration, suppression of oncogene expression, increase synthesis of mitochondrial mediated cytochrome C, BAX - 2 and many more pathways.

Table No.11 Treatment and co-treatment effects of piperine and piperidine on the anticancer potential of conventional chemotherapeutics.

Cancer	Phytochemical used	Observations	Reference
Breast Cancer	Piperine	Reduces phosphorylation of ser473 residue in Akt signaling pathway leading to apoptosis. Cancer cell migration is also reduced by piperine-mediated reduced gene expression of MMP-2 and MMP-9.	(43)
	Piperidine	Down regulates phosphorylation at Tyr 485 of p13k and ser473 of AKT signaling pathway leading apoptosis.	(44)
Lung Cancer	Piperine	Reduces the level of Bcl-2 and increases the level of Bax-2 and this high Bax: Bcl-2 ratio leading to initiation of caspase 9/3 dependent apoptosis in lung cancer cells.	(45)
	Piperidine	Along with maintaining high Bax: Bcl-2 ratio which is crucial for cancer cell apoptosis it also down regulates CD31 expression and inhibits the G1/S phase transition of cell cycle. Cell inflammation was suppressed via decreasing the levels of pro-inflammatory cytokines along with COX-2 by CELFMA.	(46)
Prostate Cancer	Piperine	Activating the caspase-3-dependent apoptotic pathway.	(47)

		Inhibition of cell growth was observed by suppressing phosphorylated STAT-3. Down regulation of the expression of Nf-kB, inducing PARP-1 cleavage.	
	Piperidine	Inhibits PC3 cell migration.	(47)

10. Pippali: The cytotoxic effects and the mechanism of action were investigated in breast cancer cells using the MTT assay and Western blot analysis, respectively. Female Sprague-Dawley rats with NMU-induced mammary tumors were used in preventive and anticancer studies. The results showed that PFPE inhibited the growth of luminal-like breast cancer cells more than the basal-like ones by induction of apoptosis. PFPE had low toxicity and a potent antitumor effect on mammary tumorigenesis in rats. (48).

Discussion: Cancer is the most prevailing disease in the present modernized world. Toxins have entered human's every part of life through all the ways including food, air, and water. Some toxins get slowly deposited in the body act as a carcinogen. People are suffering from cancer of a particular tissue or organ where the toxins get deposited. In conventional medicine surgery, chemotherapy, and radiation therapy are been used as the best treatment modality for the past few decades. These treatments have a high rate of success in cancer treatment along with some toxic effects. The chemicals and radiations used while treatment increase the chemical load and are not expelled out from the body. Both chemo and radiotherapy can damage the healthy host cells while killing the cancerous cells. Some other common side effects are tiredness, hair loss, nausea, vomiting, diarrhea, skin peeling, dryness and irritation of the skin, anemia etc. Ayurveda offers a wealth of knowledge through its purification techniques and formulations to mitigate these toxicities.

Agad formulations are anti-poisonous formulations that remove and neutralize the effects of poison in the body. One such *Agad* formulation is *Dashang Agad*. Formulation for cancer management should have the properties to increase the immune system of the body, should prevent the uncontrolled growth of the cancer cells, detoxification of the body, create an environment that is unfavorable for the cancer growth, and fight free radicals that cause mutagen changes. Most of the herbs present in *Dashang Agad* have *Katu*, *Tikta Rasa* which shows *Deepana*, *Pachana* (increase digestive fire), *Krimighna* (antimicrobial), *Kushtaghna* (alleviate skin diseases), *Mutral* (diuretic) and *Rakktashodhak* (blood purification) properties. Thus, combined effect of *Dashang Agad* helps in detoxification of body. Some drugs shows *Rasayana* property which helps to improve the immune system of the body. According to *Ayurveda Granthi* (tumor) occur due to imbalance of *Kapha-Vata Dosha* and *Arbuda* (mass swelling) occur due to imbalance of *Kapha* and *Meda Dhatu*. Seven drugs of *Dashang Agad* shows *Kapha*

Vataghna action. Out of ten ingredients nine herbs have individually proved to have anti-cancer and antioxidant properties through various research works. So, Synergistic effects of these herbs beneficial in treating cancer and improving the quality of life in cancer patients.

Conclusion: Cancer is becoming the global burden because of increase in prevalence rate every upcoming year. Hence management of cancer as well as improve the quality of life in cancer patient is the time need. Prevention and care of cancer can be effective if *Ayurvedic* approach of cancer is applied. From the above discussion we conclude that the combined effect of all the ingredients show blood purification, diuretic and immunomodulatory property. So, *Dashang Agad* may prove effective in prevention, care, and cure of carcinoma along with improving the quality of life in them.

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