

ROLE OF BHALLATAKA (SEMECARPUS ANACARDIUM L) IN THE TREATMENT OF ARBUDA (CARCINOMA)

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ABSTRACT

Human being is constantly struggling against the changing environmental conditions to maintain optimum health and vigor throughout his life. Many diseases can be correlated with Arbuda but Cancer is a parallel disease for it. The signs and symptoms of *Arbuda* can very well explained in modern terms. *Arbuda* is one of the surgical diseases and was explained in detailed by Sushruta the pioneer of in ancient ayurvedic texts. Extensive research has produced many new healing methods for the management of cancer. The treatment of cancer has increased in complexity. Surgical procedures are often less extensive than in proceeding decades. Chemotherapy as *Visha* (highly toxic) creates the tremendous *Rukshata* (dryness) in the body. The basic pathology behind the side effect of systemic chemotherapy is the vitiation of *Tridosha* mainly *Vata*. In *Ayurveda*, the action of a drug is understood by the properties of its basic physico-chemical factors. *Bhallataka* oil is possessing mainly *Tikta* and *Katu Rasa* which are effective to control the cell metabolism, in another words decreases the rate of *dhatu pusti*, specially the dhatus of *Kapha* groups like *meda*, *mamsa* etc. are comparatively affected more than others which helps in *Samprapti Vighatana* of *Arbuda*.

Keywords: *Arbuda, Carcinoma, Semecarpus anacardium, Bhallataka taila*

INTRODUCTION

Human being is constantly struggling against the changing environmental conditions to maintain optimum health and vigor throughout his life. During this struggle the internal environment of body may get deviated from normal in the form of loss of physiological control and give rise to diseases like Carcinoma (*Arbuda*). *Arbuda* is a name given to a large group of diseases, all of which have one thing in common, cells that are growing out of control. *Acharya Sushurta* has described very

clear and detailed definition of *Arbuda* that is The *Doshas* having *vitseda* in any part of the body and which is circular, fired, slightly painful, big in size, broad, slowly growing and does not suppurate¹. Extensive research has produced many new healing methods for the management of *Arbuda*. The treatment of *Arbuda* has increased in complexity. Surgical procedures are often less extensive than in proceeding decades. However, to limit the extent of surgery, the patient receives adjuvant chemotherapy and radiotherapy

which increases the duration and toxicity of treatment. Multimodal therapy, combining two or more treatment approach is now standard for many curable *Arbuda*. Failure of the universally accepted line of treatment radiation, Surgery, Chemotherapy leads man to conduct more research for cancer in all aspects and by different pathies. Though modern medicine has made more command in this field we also have approached and through research works found surprising results in many drugs like *Bhallataka* oil in *Arbuda*

Aim and objective

1. To review the *Arbuda* in Ayurvedic classics.
2. To study the role of *Bhallataka taila* in *Arbuda*.

Review of *Arbuda*

Etymological Derivation²: “*Arbuda*” is constituted of the root ward “*Arbb*” and the verb “*Udeti*”. The meaning of the “*Arbb*” is to kill, to hurt or to go towards and the meanings of the verb “*Udeti*” is to elevate, to rise, to throw up.³ “*Arbuda*” is derived as “*Aram Bundeti*”, “*Ubinder Nishamane*”, meaning which is perceived very fast means “*Sighratmapyati*”

Charaka Samhita: No specific definition available in *Charaka Samhita*, but *Acharya Charaka* described *Arbuda* in chapter dealing with *Shotha* due to similarity between basic clinical features i.e. swelling or protuberance⁴ and it is also included among the disease of vitiated *Mamsa* i.e. *Mamsa Pradoshaja Vikara*. He further writes that, as location in the body, etiology, clinical features and involvement of *Dosha* and *Dushya* of both the disease i.e. *Granthi* and *Arbuda* are identical hence the treatment prescribed for *Granthi* should be used for *Arbuda* also.⁵

Sushruta Samhita⁶: *Acharya Sushruta* has described very clear and detailed definition. That is “The *Doshas* having vitiated in any part of the body and afflicting the *Mamsa* and produce a swelling, which is circular, fixed, slightly painful, big in size, broad based, slowly growing and does not suppurate.” *Arbuda* is also described in 6th *Twaka Vikara*⁷. In the same way, while dealing with *Kshudra Rogas*, he has described, another variety of *Arbuda* named *Sharkararbuda* and it is a *Sadhya* variety.

Astanga Samgraha and Astanga Hridaya: *Acharya Vagbhata* noted that *Arubada* is relatively bigger than *Granthi* without mentioning its etiopathogenesis.⁸ It is included among the disease caused by vitiation of *Mamsa* or *Mamsa* and *Medavridhijanya Vyadhi*. The clinical features of all *Arbuda* except *Rakta Arbuda* are said to be identical to these described for *Granthi*. In the *Kshudra Rogas*, he has mentioned, about *Sharkararbuda*⁹, as *Sadhya* variety.

Madhava Nidana: *Acharya Madhava* while describing the definition of *Arbuda* he said the vitiated *Dosha* afflict the *Mamsa* and *Rakta* both to produce a swelling¹⁰.

Bhavaprakash and Sharangdhara: *Bhavaprakash* and *Sharangdhara* agree with *Madhavkara* regarding the definition of *Arbuda*. Description of etiology and clinical features of *Arbuda* is available in detail.

Classification of *Arubada*: The subject is scattered here and there and thus a systemic classification is not found. *Acharya Sushruta* has given the classification. The same disease entity is available in scattered form relating to the site or organ, chronicity, *Sadhyasadhya*, etc. in various other places with different Ayurvedic texts. Hence an effort has been made to classify the *Arbuda* based on the description available in *Brihatrayee* and *Laghutrayee*.

Classification		Ch.	Su.	A.S.	A.H.	Ma.Ni.	B.P.	Sha.
According to <i>Dosha</i> & <i>Dushya</i> ¹¹	<i>Vataja Arbuda</i>	-	+	+	+	+	+	+
	<i>Pittaja Arbuda</i>	-	+	+	+	+	+	+
	<i>Kaphaja Arbuda</i>	-	+	+	+	+	+	+
	<i>Mamsaja Arbuda</i>	-	+	+	+	+	+	+
	<i>Medoja Arbuda</i>	-	+	+	+	+	+	+
	<i>Raktaja Arbuda</i>	-	+	+	+	+	+	+
According to	<i>Sadhya Arbuda</i>	-	+	+	+	+	+	+
	<i>Asadhya Arbuda</i>	-	+	+	+	+	+	+

prognosis ¹²								
According to metastasis ¹³	<i>Adhya Arbuda</i>	-	+	-	-	+	+	-
	<i>Dwira Arbuda</i>	-	+	-	-	+	+	-

Adhya Arbuda: This is the condition when another Arbuda is develops over previous one.

Dwira Arbuda: When two *Arbudas* growing simultaneously or one after the other i.e. *Dwandaja* are termed as *Dwira Arbuda*.

Arbuda Based on Prognosis:

• *Sadhya Arbuda:* *Vataja Arbuda, Pittaja Arbuda, Kaphaja Arbuda, Medoja Arbuda.*

• *Asadhya Arbuda:* *Raktarbuda, Mamsarbuda, Adhyarbuda, Dwirarbuda, Marma Janita.*

Nidana¹⁴: As Charaka included *Arbuda* in the chapter of *Shothasangraha* and described *Arbuda* as **Shopha Vishesha** (one of the forms of *Shotha*). The etiology described in *Shotha* can also be considered as etiology of *Arbuda*. General diseases like *Jwara*. Not taking food or proper food, Emaciation due to different causes, *Kshara* indicates use of irritants, Taking *Dadhi* etc. *Abhishyandi Padarthas* Formation of un-assimilable products in *Jatharagni* and *Dhatwagni* level, Using new water etc.(water of the first starting of rainy

season), Taking poisonous foods, Not going for purification methods when it is needed, Within the body due to *Doshic* vitiation, Due to abnormal deliveries and abortion etc. leading to insult and irritation of tissues, Doing un-suitable actions *Vamana* etc.¹⁵ *Harita* says that blood vessels sprout either due to suppression of natural urges, ulcers (which leads to overbalanced nervous system i.e. *Vata*). These newly formed vessels are again obstructed resulting into obstruction of passes of blood. Due to this obstruction in flow of blood, big and thick *Arbuda* develops.¹⁶

Pruvarupa: None of the Acharyas have described the *Purvarupa* (Premonitory Symptoms) of the disease *Arbuda*.

Rupa: Detailed description of this variety is explained by different Acharyas. Acharya Sushruta states that clinical features of *Vataja, Pittaja, Kaphaja and Medoja* are always like that of *Granthi*, after which features of *Rakta* and *Mamsarbuda* are describe.

Samanya Lakshana-

• <i>Vrittam</i>	Round
• <i>Sthiram</i>	Firm (stability)
• <i>Mandaruja</i>	Mild pain
• <i>Mahantam, Analpa mulam</i>	Deep seated root
• <i>Chirvridhi</i>	Gradually increasing
• <i>Apakam</i>	never suppurates

Vishesha Lakshana-

Name of Arbuda	Colour	Consistency	Characteristic Feature	Discharge	Progression
<i>Vataja</i>	Black	Not very soft	Piercing, perforating stretching type of pain	Fresh blood discharge	Suddenly increase or decrease
<i>Pittaja</i>	Red/yellow	-	Burning sensation, Fuming, sucking, Throbbing type of pain	Hot blood Discharge	-
<i>Kaphaja</i>	Glossy yellowish white	Stony hard & cold	Pain less, lightly - painful, itching sensation	Thick discharge	Increases gradually
<i>Raktaja</i>	Red coloured	-	Pandu due to excess blood loss	Vitiated blood	Progressive in nature

				discharge	
<i>Mamsaja</i>	Skin coloured	Smooth stony hard	Painless or slight pain	-	-
<i>Medoja</i>	Glossy whitish yellow	Smooth big soft	Slight pain, itching, Sensation, painless	Black or white Meda is discharge	increase or decrease with Meda content of body

Samprapti Ghataka

- *Dosha*: Predominance of *Kapha and Vata with Tridosha*
- *Dushya*: *Rasa, Mamsa and Meda*
- *Srotas*: *Rasavaha, Mamsavaha and, Medavaha*
- *Sroto Dushti*: *Sanga and Siragranthi*
- *Agni:Manda*
- *Rogamarga*: *Bahya*
- *Udbhavasthana*: *Ama-Pakvashaya Samuttha*
- *Pratyatma Linga*: *Mamsopachayam Tu Shopham*

DISCUSSION

An Ayurvedic classic reveals symptomatology of the disease entity “*Arbuda*” which can be correlated to that of tumor or cancer or including in the vast field of cancer. Outstanding symptom is a swelling, which continuously goes on increasing in size but never reaches the stage of suppuration. Description of it is available in various Samhita in a scattered manner. Acharyas have encountered this disease in the scope of surgery. The etiopathogenesis of *Arbuda* reveals that the main motto of treatment is to disentangle the link between *Dosa and Dushaya*. After *Aahara Grahana* and *Pachana*, it results in *prasada* and *Kitta* form the former provides nutrition to the *Uttara Dhatu* Being stimulated by the *Antaragni*, the *Dhatvagni* converts the *Aahara Rasa* to *Uttarotara Dhatu*, thus help in the growth and development of the body. But here due to in equilibrium of *Agni*, *Aama* is produced. *Aama* is the prime factor of all disease. If derangement occurs at the *Dhatvagni* level, then it is known that the ultimate vitiations are of a serious nature. Its clarification can be understood in the manner that the *Agni* of which *Dhatu* is *Mandhya*, results in *prakruta Dhatu Kshaya and Aprakrut Dhatu Vrudhi*.

Probable mode of action of *Bhallataka oil* (Semecarpus anacardum): In Ayurveda, the action of a drug is

understood by the properties of its basic physico-chemical factors. The factors are *Rasa, Guna Virya, Vipaka and Prabhava* of the drug; these primarily affect the *doshas* and determine their *dosha shamaka* activity, this in turn correct the vitiated *doshas* and thus maintain the *doshic* equilibrium. This is the basic principle of the treatment. *Bhallataka oil*¹⁷ is possessing mainly *Tikta* and *Katu Rasa* which are effective to control the cell metabolism, in another words decreases the rate of *dhatu pusti*, specially the dhatus of *Kapha* groups like *meda, mamsa* etc. are comparatively affected more than others. Moreover, these rasas are considered as the best rasa for *amahara, kaphahara, medohara* and in the manifestation of *Arbuda, Kapha mamsa and Meda* play an important role. Further based on *Gunas*, it consists of *Laghu, Tikshana, Ushana* and *Sara*, because of its *ushnatava*, it subsides the *Vayu*, which is responsible for growth and pain. Due to *Sara guna* it retrieves *mala* and *pitta*, it enters in each cell and *srotas* of the body, because of presence of *Laghu guna*, and thus corrects the *dusties* of *srotas* and dhatus by its actions like *Pachana, Shodhana, Kledaprasadana, Vishada* etc. It is also a good *Agnideepana*. Regarding *virya*, *Bhallataka* having *Ushna virya*, so it digests the *ama* and increases the *agni*, similarly relieves the *Kapha and Vata dosha*. *Dosha prabhava* of *Bhallataka* is *vata kapha hara*. There is no *kapha vataja* disease, which cannot be cured by *Bhallataka*.¹⁸ *Dhatu Prabhava* are *mamsalekhana, Sonita Sanghata, Bhedhana and medohara, mala prabhava* are *mamsalekhana, sonita sanghata, Bhedhana and medohara, Mala prabhava are malanuta, swed/kledhara and malashodhana*. These all properties and effects are just opposite to the *samprapti* of disease *Arbuda-Cancer*. From the *Amsansakalpana* viewpoint *kapha* is involved in this disease with its guru, *Manda, Sthria, Mahana and analpmoola gunas*. The *Bhallataka* possess all the properties just anti to above *gunas*. Similarly, the *dusti* of *Mamsa, Meda and*

Rakta are also corrected by its pharmacological actions. Hence based on above said synergistic properties, the *antiarbuda* actions can be explained and discussed from the ayurvedic viewpoint. An extensive review describes the phytochemical and pharmacological properties of *Semecarpus anacardium*. The chloroform extract of *Semecarpus anacardium* possess *antitumour* action with increased life span against leukaemia, melanoma and glioma.¹⁹ The milk extract of *Semecarpus anacardium* produces regression of hepatocarcinoma by stimulating host immune system²⁰ and normalizing tumour markers including alpha-fetoprotein levels. This preparation stabilizes the lysosomes and normalizes glycoprotein and mineral content in the body during cancer progression. It also corrects hypoglycaemia and controls abnormal lipid peroxidation by the maintenance of antioxidant defence status. In the microsomes, it acts as a bifunctional inducer of both phase I and II biotransformation enzymes and prevents tumour initiation by preventing carcinogen activation²¹ thus *Bhallataka* which are widely used and scientifically proven of their anticancer properties.

CONCLUSION

Arbuda originates due to metabolic changes. *Vata dosha* is responsible for cell division. Aggravation of *vata* and *kapha dosha* or both the *doshas* interacting with one another may result in proliferation of cells. *Bhallataka* oil is possessing mainly *Tikta* and *Katu Rasa* which are effective to control the cell metabolism, in another words decreases the rate of *dhatu pusti*, specially the *dhatu* of *Kapha* groups like *meda*, *mamsa* etc. are comparatively affected more than others. Which helps in *Samprapti Vighatana* of *Arbuda*.

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