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 physcio-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 dhatus 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 suppurate”1. 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 Derivation**: “Arbuda” is constituted of the root word “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. “Arbuda” is derived as “Aram Bundeti”, “Ubinder Nishaman”, meaning which is perceived very fast means “Sighratmapyatı”

**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 protuberance 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 Dushhya of both the disease i.e. Granthi and Arbuda are identical hence the treatment prescribed for Granthi should be used for Arbuda also.

**Sushruta Samhita**: Acharya Sushurta 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. 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 Arbada is relatively bigger than Granthi without mentioning its etiopathogenesis. It is included among the disease caused by vitiation of Mamsa or Mamsa and Medavridhhijanya 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, 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 swelling. 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 Arbuda**: The subject is scattered here and there and thus a systemic classification is not found. Acharya Sushrutha has given the classification. The same disease entity is available in scattered form relating to the site or organ, chronicity, Sadhyasadhyata, 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.

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<tbody>
<tr>
<td>According to Dosha &amp; Dushya&lt;sup&gt;11&lt;/sup&gt;</td>
<td>Vataja Arbuda</td>
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<td>Pittaja Arbuda</td>
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<td>Kaphaja Arbuda</td>
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<td>Mamsaja Arbuda</td>
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<td>Medoja Arbuda</td>
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<td>Raktaja Arbuda</td>
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<td>Sadhya Arbuda</td>
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<td>Asadhyar Arbuda</td>
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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.

Nidana: 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. 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.

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 Aacharyas. Aacharya 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-
- Vritam: Round
- Sthiram: Firm (stability)
- Mandaraja: Mild pain
- Mahantam, Analpa mulam: Deep seated root
- Chirvridi: Gradually increasing
- Apakam: never suppurates

### Vishesha Lakshana-
<table>
<thead>
<tr>
<th>Name of Arbuda</th>
<th>Colour</th>
<th>Consistency</th>
<th>Characteristic Feature</th>
<th>Discharge</th>
<th>Progression</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vataja</td>
<td>Black</td>
<td>Not very soft</td>
<td>Piercing, perforating stretching type of pain</td>
<td>Fresh blood discharge</td>
<td>Suddenly increase or decrease</td>
</tr>
<tr>
<td>Pittaja</td>
<td>Red/yellow</td>
<td>-</td>
<td>Burning sensation, Fuming, sucking type of pain</td>
<td>Hot blood Discharge</td>
<td>-</td>
</tr>
<tr>
<td>Kaphaja</td>
<td>Glossy yellowish white</td>
<td>Stony hard &amp; cold</td>
<td>Pain less, lightly - painful, itching sensation</td>
<td>Thick discharge</td>
<td>Increases gradually</td>
</tr>
<tr>
<td>Raktaja</td>
<td>Red coloured</td>
<td>-</td>
<td>Pandu due to excess blood loss</td>
<td>Vitiated blood</td>
<td>Progressive in nature</td>
</tr>
</tbody>
</table>
**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. Aacharyas 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 anacardium): In Ayurveda, the action of a drug is understood by the properties of its basic physcio-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* 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* doshas. *Dosa prabhava* of *Bhallataka* is *vata kapha hara*. There is no *kapha vataja* disease, which cannot be cured by *Bhallataka*. *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*, *Shthra*, *Mahana* and *analpmoola gunas*. The *Bhallataka* possess all the properties just anti to above *gunas*. Similarly, the *dusti* of *Mamsa, Meda* and

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<tr>
<td><strong>Mamsaja</strong></td>
<td>Skin coloured</td>
<td>Smooth stony hard</td>
<td>Painless or slight pain</td>
<td>discharge</td>
</tr>
<tr>
<td><strong>Medoja</strong></td>
<td>Glossy whitish yellow</td>
<td>Smooth big soft</td>
<td>Slight pain, itching, Sensation, painless</td>
<td>Black or white Meda is discharge</td>
</tr>
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**Samprapti Ghataka**

- **Dosha**: Predominance of *Kapha and Vata* with *Tridosha*
- **Dushya**: *Rasa, Mamsa and Meda*
- **Srotas**: *Rasavaha, Mamsavaha and, Medavaha*
- **Sroto Dushti**: *Sanga and Siragranti*
- **Agni**: *Manda*
- **Rogamarga**: *Bahya*
- **Udbhavasthana**: *Ama-Pavkashaya Samuththa*
- **Pratyatma Linga**: *Mamsopachayam Tu Shopham*
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 anacardum. The chloroform extract of Semecarpus anacardum possess antitumour action with increased life span against leukaemia, melanoma and glioma. The milk extract of Semecarpus anacardum produces regression of hepatocarcinoma by stimulating host immune system and normalizing tumour markers including alpha-fetoprotein levels. This prepara-tion 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 activation 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, especially 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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