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Conceptual Review Of *Arbuda* In Ayurvedic Classics With Modern Correlation To Tumor

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ABSTRACT

Background: *Arbuda* is described in Ayurvedic literature as a *Mamsa Pradoshaja Vikara* characterized by localized, immovable, painless swelling with progressive growth, caused primarily by *Vata* and *Kapha* vitiation along with *Mamsa*, *Meda*, and *Rakta* involvement. Ancient texts such as *Charaka Samhita*, *Sushruta Samhita*, and *Ashtanga Hridaya* provide detailed descriptions of its *Nidana*, *Lakshana*, *Samprapti*, and *Chikitsa*. In modern medicine, tumors are abnormal masses of tissue resulting from uncontrolled cell proliferation, categorized into benign and malignant forms. The classical features of *Arbuda* resemble certain benign and malignant neoplasms described in oncology. Understanding *Arbuda* through both Ayurvedic and modern perspectives provides a holistic approach for prevention, early diagnosis, and integrative management. **Aim** To review the concept of *Arbuda* in Ayurveda and correlate it with modern tumor pathology. **Objectives** Compile Ayurvedic references on *Arbuda*. Describe its *Nidana*, *Lakshana*, *Samprapti*, and *Chikitsa*. Correlate Ayurvedic and modern concepts of tumors. Compare clinical features with benign and malignant types. Explore integrative management possibilities. **Materials and Methods:** A conceptual review was undertaken by analyzing classical Ayurvedic references from *Brihattrayi* and *Laghutrayi*, along with contemporary commentaries, Nighantus, and peer-reviewed modern oncology literature. Comparative analysis was performed between the Ayurvedic *Lakshana*, *Samprapti*, and *Chikitsa* of *Arbuda* and modern definitions, classifications, and pathophysiology of tumors. **Results:** Ayurvedic descriptions of *Arbuda* align with modern tumor pathology in aspects of etiological factors, progressive nature, and potential for malignancy in *Dushta Arbuda*. *Kapha* dominance explains the slow, firm growth, while *Vata* involvement accounts for the spread in malignant cases. Ayurvedic management strategies focus on *Shodhana*, *Shamana*, and *Raktamokshana* along with *Rasayana* to prevent recurrence, whereas modern oncology employs surgical excision, chemotherapy, radiotherapy, and targeted therapies. Both approaches emphasize early detection for favorable prognosis. **Conclusion:** The correlation between *Arbuda* and tumors highlights the timeless relevance of Ayurvedic pathology and therapeutics in understanding neoplastic diseases. Integrative application of classical diagnostic principles with modern oncological interventions may enhance patient outcomes. Further research is needed for clinical validation of Ayurvedic interventions in tumor management.

Keywords: *Arbuda*, Tumor, *Mamsa Pradoshaja Vikara*, *Kapha-Vata Dosha*, Ayurveda, Oncology

INTRODUCTION

In Ayurveda, *Arbuda* is classified as a *Mamsa Pradoshaja Vikara*, denoting a pathological condition arising from the vitiation of *Mamsa Dhatu*. Acharya Sushruta describes it as a large, immovable, rounded swelling that develops slowly without suppuration and is often painless in its initial stages. The condition arises due to the vitiation of *Vata* and *Kapha Dosha*, with simultaneous involvement of *Mamsa*, *Meda*, and *Rakta Dhatu*. Ancient Ayurvedic texts emphasize the importance of recognizing *Arbuda* early to prevent its progression into *Dushta Arbuda*, which parallels the malignant transformation described in modern oncology.1

References to *Arbuda* are found in the *Brihattrayi—Charaka Samhita*, *Sushruta Samhita*, and *Ashtanga Hridaya*—as well as in *Laghutrayi* texts and various Nighantus. Acharya Sushruta, considered the father of Indian surgery, provided detailed surgical guidelines for the excision of *Arbuda*. The historical narratives suggest that ancient physicians were well aware of localized abnormal tissue growths and their potential to impair bodily functions. These descriptions highlight a sophisticated understanding of tumor-like conditions long before the advent of modern histopathology.[2]

In contemporary biomedical science, a tumor is defined as an abnormal mass of tissue resulting from excessive, uncoordinated cell proliferation that persists even after the cessation of the stimulus causing it. Tumors are broadly categorized into benign and malignant types, with malignant forms exhibiting invasive growth and metastatic potential. Many clinical features of *Arbuda*, such as localized swelling, slow growth in benign types, and aggressive spread in *Dushta* cases, correspond closely with the modern understanding of neoplastic processes.[3]

From an Ayurvedic perspective, the etiopathogenesis (*Samprapti*) of *Arbuda* involves *Dosha-Dushya Sammurchhana*, particularly the vitiation of *Kapha* leading to tissue overgrowth, *Vata* contributing to abnormal proliferation and spread, and *Rakta* influencing the vascular component. In modern medicine, tumorigenesis is attributed to genetic mutations, disruptions in cell cycle regulation, and environmental or lifestyle-related risk factors such as chronic inflammation, carcinogen exposure, and immunosuppression. This dual perspective enhances our understanding of both the internal and external contributors to tumor development.[4]

Correlating *Arbuda* with modern tumor pathology offers significant benefits for integrative medicine. Ayurveda provides a holistic framework, emphasizing prevention, strengthening of host immunity (*Vyadhikshamatva*), and restoration of *Dosha* balance, while modern oncology offers advanced diagnostic tools and targeted therapeutic modalities. This integrative approach may improve patient quality of life, especially in cases where long-term management is required, or recurrence is a concern.[5]

Given the rising global incidence of tumors and the limitations associated with current therapeutic options, there is a renewed interest in exploring traditional medical systems for complementary strategies. Revisiting the concept of *Arbuda* with a modern scientific lens can help in identifying safe, cost-effective, and culturally acceptable treatment protocols. This conceptual review aims to bridge the knowledge gap between ancient Ayurvedic wisdom and contemporary cancer biology, paving the way for collaborative research and evidence-based integrative oncology.[6]

AIM AND OBJECTIVES

Aim

To review the concept of *Arbuda* in Ayurveda and correlate it with modern tumor pathology.

Objectives

1. Compile Ayurvedic references on *Arbuda*.
2. Describe its *Nidana*, *Lakshana*, *Samprapti*, and *Chikitsa*.
3. Correlate Ayurvedic and modern concepts of tumors.
4. Compare clinical features with benign and malignant types.
5. Explore integrative management possibilities.

MATERIAL AND METHOD

The present conceptual review is based on a comprehensive study of classical Ayurvedic literature, including *Charaka Samhita*, *Sushruta Samhita*, *Ashtanga Hridaya*, *Madhava Nidana*, and various Nighantus, along with relevant commentaries. Modern medical information on tumors was collected from standard oncology textbooks, peer-reviewed journals, and authentic online databases such as PubMed and Google Scholar. The collected data were analyzed to identify similarities and differences in definitions, classifications, pathogenesis, clinical features, and management approaches of *Arbuda* and tumors. Correlation was drawn through comparative interpretation, focusing on bridging Ayurvedic principles with modern oncological concepts.

CONCEPTUAL STUDY

ARBUDA

The term *Arbuda* is derived from the Sanskrit root "*Arbud*," meaning swelling, mass, or lump. In Ayurvedic literature, it is described as a *Mamsa Pradoshaja Vikara* characterized by a large, immovable, non-suppurating, and usually painless swelling that develops slowly but progressively. Acharya Sushruta defines *Arbuda* as a pathological overgrowth of *Mamsa Dhatu*, arising from the vitiation of *Vata* and *Kapha Dosha*, often involving *Mamsa*, *Meda*, and *Rakta Dhatu*.[7]

Types of *Arbuda*

According to *Sushruta*, *Arbuda* can occur in different sites such as *Mamsa Arbuda*, *Medoja Arbuda*, and organ-specific types. The condition is also categorized into *Shuddha Arbuda* (benign) and *Dushta Arbuda* (malignant), based on prognosis and clinical features.[8]

Nidana Panchaka

*Nidana (*Causative Factors)[9]

Acharya Sushruta and other classics describe multiple *Nidanas* that vitiate *Kapha* and *Vata*, involving *Mamsa*, *Meda*, and *Rakta Dhatu*, eventually leading to *Arbuda*. The important causative factors include:

- Excessive intake of *Guru* (heavy), *Snigdha* (unctuous), *Madhura Rasa* (sweet), and *Sheeta* (cold) food.
- Habitual consumption of *Mamsa* (meat), *Dadhi* (curd), *Ghrita*, and oily preparations in large quantities.
- *Avyayama* (sedentary lifestyle) and *Divaswapna* (day sleep).
- Suppression of natural urges (*Vegavarodha*).
- Chronic mechanical irritation or trauma at a particular site.
- Overindulgence in *Kapha*-increasing diet and lifestyle.
- Excessive mental stress, grief, or fear contributing to *Dosha* vitiation.

***Purvarupa* (Premonitory Signs)[10]**

- *Gaurava* (localized heaviness).
- *Sthambha* (stiffness and rigidity).
- Appearance of a small, rounded, painless nodule.
- Mild localized discomfort without inflammatory signs.
- Slow, progressive enlargement over time.

***Rupa* (Clinical Features)[11]**

As per *Sushruta Samhita*, *Arbuda* is characterized by:

- **Size:** Large (*Maha*), prominent swelling.
- **Consistency:** Firm (*Ghana*), hard mass.
- **Mobility:** Immovable (*Sthira*).
- **Progression:** Gradually increasing size (*Chira Vriddhi*).
- **Pain:** Initially painless; pain develops in *Dushta Arbuda*.
- **Suppuration:** Absent in early stages (*Ashopha*).
- **Dushta Arbuda Lakshana:**
- Change in skin color (*Twak Vaivarnyata*).
- Ulceration (*Vrana*), foul smell (*Durgandha*).
- Profuse discharge (*Picchila Srava*).
- Rapid and irregular growth.
- Involvement of nearby tissues and organs.

***Samprapti*[12]**

Nidana Sevana
↓
Vitiation of Kapha + Vata Dosha
↓
Dushti of Mamsa, Meda, and Rakta Dhatu
↓
Srotodushti in Mamsavaha and Raktavaha Srotas
(Mainly Sanga type)
↓
Sthana Samshraya in Mamsa Dhatu
↓
Abnormal Localized Mamsa Vriddhi
↓
Formation of Shuddha Arbuda (Benign)
↓
(If Tridosha + Rakta Dushti + Marmasthana Involvement)
↓
Dushta Arbuda (Malignant)

***Samprapti* (Pathogenesis) *Ghatak*[13]**

- **Dosha:** Predominantly *Kapha*, associated with *Vata*.
- **Dushya:** *Mamsa*, *Meda*, *Rakta*.
- **Srotas involved:** *Mamsavaha Srotas*, *Raktavaha Srotas*.
- **Srotodushti Prakara:** *Sanga* (obstruction) and *Atipravritti* (abnormal growth).
- **Udbhava Sthana:** *Amashaya*.
- **Adhisthana:** Localized *Mamsa Dhatu* region.

***Upashaya–Anupashaya*[14]**
- ***Upashaya* (Relieving Factors):**
- *Kapha-Vata Shamana* measures like *Langhana*, *Lekhana*, *Shodhana Chikitsa* (*Vamana*, *Virechana*, *Raktamokshana*).
- Use of *Tikta* and *Katu Rasa* predominant herbs.
- *Rasayana* therapy to strengthen *Vyadhikshamatva* (immunity).
- ***Anupashaya* (Aggravating Factors):**
- Intake of *Guru*, *Snigdha*, *Madhura Rasa* food.
- Sedentary lifestyle, *Divaswapna*.
- Exposure to cold, damp conditions.
- Continued indulgence in *Kapha*-promoting diet and habits.

Prognosis (*Sadhya–Asadhyata Lakshana*)[15]
- **Shuddha Arbuda (Benign Type):**
- Slow-growing, localized, non-painful swelling without ulceration.
- If detected early and treated appropriately, it may be *Sadhya* (curable).
- Responds well to *Shodhana*, *Shamana*, and surgical excision (*Bhedana*).
- **Dushta Arbuda (Malignant Type):**
- Rapid growth, infiltration to surrounding tissues, ulceration, foul-smelling discharge, pain, and cachexia.
- Considered *Asadhya* (incurable) in classical texts due to *Tridosha* involvement, *Marmasthana* infiltration, and depletion of *Ojas*.
- Treatment aims at *Vyadhi Prashamana* (symptom palliation) and *Roga Upashamana* rather than complete cure.

MODERN REVIEW

TUMOR

A tumor (neoplasm) is defined as an abnormal mass of tissue, the growth of which exceeds and is uncoordinated with that of normal tissues, and persists in the same excessive manner after cessation of the stimuli which evoked the change.[16]

Classification of Tumors[17]

1. Based on Behavior
- **Benign Tumors:**
- Slow-growing, well-differentiated, localized, do not invade surrounding tissue or metastasize.
- Examples: Fibroma, Lipoma, Adenoma.
- **Malignant Tumors (Cancer):**
- Rapid growth, poor differentiation (anaplasia), invade surrounding tissues, metastasize to distant sites.
- Examples: Carcinoma (epithelial origin), Sarcoma (mesenchymal origin).

2. Based on Histogenesis (Tissue of Origin)[18]
- Epithelial tumors.
- Mesenchymal tumors.
- Mixed tumors (e.g., Pleomorphic adenoma).

Etiology[19]

1. Genetic Factors:
- Activation of proto-oncogenes to oncogenes.
- Inactivation of tumor suppressor genes (e.g., p53, Rb).
- DNA repair defects.

2. Environmental Factors:
- Chemical carcinogens (tobacco, asbestos, aflatoxin).
- Physical agents (UV radiation, ionizing radiation).
- Biological agents (oncogenic viruses like HPV, EBV, HBV, HCV).

3. Host Factors:
- Age, sex, hormonal status.
- Immunosuppression.
- Chronic inflammation.

Pathogenesis (General Mechanisms)[20]
- **Initiation:** Irreversible genetic change in target cell DNA.
- **Promotion:** Clonal expansion of initiated cells under influence of promoters.

• **Progression:** Acquisition of aggressive behavior, invasion, and metastasis.

Microscopic Features[21]
Benign Tumors:
• Well-differentiated cells resembling parent tissue.
• Few mitotic figures, normal morphology.
• Encapsulation common.

Malignant Tumors:
• Pleomorphism, hyperchromatic nuclei, abnormal mitotic figures.
• Loss of polarity and differentiation (anaplasia).
• Invasion of basement membrane, tissue destruction.
• Angiogenesis and necrosis often present.

Spread of Malignant Tumors
• Local Infiltration: Progressive invasion into surrounding tissues.
• Lymphatic Spread: Common in carcinomas.
• Hematogenous Spread: Common in sarcomas.
• Transcoelomic Spread: Seeding of body cavities (e.g., ovarian carcinoma in peritoneum).
Prognosis[22]
• Determined by tumor type, grade (degree of differentiation), and stage (extent of spread).
• Early-stage, low-grade tumors have better outcomes.
• Advanced-stage, high-grade tumors carry poor prognosis despite treatment.

RESULT AND FINDINGS

• *Arbuda* is a *Mamsa Pradoshaja Vikara* caused by *Kapha* and *Vata* vitiation, involving *Mamsa*, *Meda*, and *Rakta Dhatu*.
• *Sushruta Samhita* gives the most detailed account, including *Nidana*, *Samprapti*, *Lakshana*, and *Chikitsa*.
• *Shuddha Arbuda* is slow-growing, localized, non-suppurating, and correlates with benign tumors.
• *Dushta Arbuda* is rapidly growing, invasive, ulcerated, foul-smelling, and correlates with malignant tumors.
• *Kapha* dominance in *Arbuda* corresponds to the stable, encapsulated nature of benign tumors.
• *Vata* association in *Dushta Arbuda* aligns with aggressive spread and metastasis in malignant tumors.
• *Shodhana* therapies include *Vamana*, *Virechana*, and *Raktamokshana*.
• *Shamana* measures use *Kapha-Vata Shamana* herbs such as *Kanchanar Guggulu*, *Haridra*, and *Varuna*.
• Surgical excision (*Bhedana*) is recommended for accessible growths.
• *Rasayana* therapy is advised for immunity and recurrence prevention.
• Modern medicine uses surgical removal, chemotherapy, radiotherapy, immunotherapy, and targeted therapy.
• Tumor management in modern pathology focuses on grading, staging, and histopathological diagnosis.
• Ayurveda emphasizes prevention, immune strengthening, and recurrence prevention, while modern medicine offers advanced diagnostics and therapeutics.
• Combined application of both systems can improve prognosis, quality of life, and palliative care outcomes.

DISCUSSION

The present review highlights that the concept of *Arbuda* in Ayurveda is remarkably parallel to the modern understanding of tumor pathology. Acharya Sushruta's description of *Arbuda* as a large, firm, immovable, and non-suppurating swelling with slow progression reflects the benign nature of many neoplasms. His distinction between *Shuddha Arbuda* and *Dushta Arbuda* closely aligns with the benign–malignant classification in modern oncology. The observation that *Dushta Arbuda* involves rapid growth, ulceration, foul-smelling discharge, pain, and infiltration into surrounding tissues mirrors the clinical features of advanced malignant tumors.[23]
Ayurveda attributes the origin of *Arbuda* to *Kapha* and *Vata* vitiation along with the *Dushti* of *Mamsa*, *Meda*, and *Rakta Dhatu*. The *Kapha* dominance explains the stable, encapsulated growth of benign tumors, while the *Vata* component corresponds to the invasive and metastatic potential seen in malignant cases. This *Dosha-Dushya Sammurchhana* concept finds resonance in modern tumor biology, where disruption in cellular growth control, angiogenesis, and genetic instability drive tumor initiation and progression.[24]
From a therapeutic standpoint, Ayurveda recommends a multi-pronged approach, starting with *Shodhana Chikitsa* to eliminate vitiated *Dosha* and *Rakta*, *Shamana* measures with *Kapha-Vata Shamana* herbs, surgical excision (*Bhedana*)

where indicated, and *Rasayana* therapy for immune enhancement and recurrence prevention. These principles emphasize not just removal of the growth, but correction of the underlying *Dosha* imbalance and strengthening of host defense mechanisms (*Vyadhikshamatva*). Modern medicine, on the other hand, relies on precise diagnosis through histopathology, staging, and grading, followed by targeted therapies such as surgery, radiotherapy, chemotherapy, immunotherapy, and molecular-targeted agents.[25]

An important point emerging from this review is the integrative potential of combining Ayurvedic and modern approaches. Ayurvedic modalities can contribute in the preventive phase, in reducing treatment-related side effects, and in supporting immune recovery after modern interventions. Modern oncology can complement Ayurveda by providing accurate diagnosis, staging, and targeted destruction of tumor cells. Together, they can address both the root cause and the manifestation of disease.[26]

The correlation between *Arbuda* and tumors underscores the advanced level of clinical observation in classical Ayurvedic texts. Although molecular-level explanations were absent, the holistic approach to etiology, pathology, and prognosis demonstrates a sophisticated understanding of tumor-like conditions. Further interdisciplinary clinical research is required to validate Ayurvedic interventions in tumor management and to explore evidence-based integration into oncology practice.[27]

CONCLUSION

The review establishes that *Arbuda*, as described in Ayurvedic classics, shares striking similarities with the modern concept of tumors in terms of etiology, pathogenesis, clinical features, classification, and prognosis. *Shuddha Arbuda* aligns with benign tumors, while *Dushta Arbuda* correlates with malignant neoplasms. Ayurveda offers a comprehensive approach focusing on *Dosha-Dushya* correction, immune strengthening, and recurrence prevention through *Shodhana*, *Shamana*, surgical measures, and *Rasayana* therapy, whereas modern oncology provides precise diagnostics and targeted treatments. Integrating both systems may enhance prevention, improve treatment outcomes, and support quality of life, highlighting the timeless relevance of Ayurvedic insights in contemporary tumor management.

CONFLICT OF INTEREST –NIL

SUPPORT OF SOURCE –NONE

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