



A CLASSICAL REVIEW OF HERBOMINERAL PREPARATION AND ITS IMPACT IN THE MANAGEMENT ARBUDA.

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ABSTRACT

Background: Cancer is the leading cause of death worldwide accounting for about 22% of mortality as per WHO. In spite of ever-increasing efforts to understand it as a process, its incidence in the population increasing day by day. A unique perspective of diagnosis and treatment can be seen in ayurveda with the inculcation of natural remedies, rasoushadhi prayoga, rasayana prayoga and preventive strategies. **Materials and methods:** Some of the common rasa(mineral) preparations given internally are navajeevana rasa, kamaudgaha rasa, keharuba pisthi, navapasanam, raktamritha somakalpa sinduram, pravala chandrodaya rasa, chandramritha sinduram, kapala bhasma apart from single rasa dravya prayoga. **Results:** Rasaoushadhies are recommended in minute doses/trace or ultra-trace amounts (Alpa/Swalpa Matra) and since these are inorganic in nature most often, they are tasteless hence not poses any problem of palatability or acceptability. Ayurvedic preparations can act as an adjuvant or a co-therapy along with chemotherapy or radiotherapy. It is also helpful in post surgery care. **Conclusion:** Cancer treatment through ayurveda does not only focus on the area of the malignancy but on the entire system, as the whole-body crust return to harmony for the disease to be traced permanently and not reoccur elsewhere. This can be effectively done by rasoushadhi chikitsa (herbo mineral treatment)

KEYWORDS :

INTRODUCTION

Cancer is the leading cause of death worldwide accounting for about 22% of mortality as per WHO¹. It is a widely popular disease in spite of ever-increasing efforts to understand it as a process, its incidence in the population increasing day by day. Ayurveda is a comprehensive science that promotes health in healthy people and treats illness in those who already have it. The standard of living has been declining as a result of sedentary lifestyles, demanding jobs, and competitive living. One of the main results of this unhealthy lifestyle is *Arbuda*, or cancer. Ayurveda offers a distinctive approach to diagnosis and therapy through the use of natural remedies, *rasaoushadi prayoga* (mineral drugs), *rasayana prayoga* (rejuvenation therapy), and preventative measures. Ayurveda describes cancer as inflammatory or non-inflammatory swelling and mentions them as *Granthi* (minor neoplasm) or *Arbuda* (major neoplasm). *Arbuda* is one of the surgical diseases and was explained in detail by Acharya *Sushruta*, the pioneer of Surgery. According to the modern medicine cancer is the uncontrolled growth of abnormal cells.

MATERIALS AND METHOD

Cancer is a phrase used to describe an abnormal growth that exhibits excessive cell proliferation. This happens regardless of what the body requires. The biological nutrients are used up in this unchecked cell multiplication, which is most likely a parasitic connection. A change in the ratio between their rates of growth, differentiation, and death is what causes the body to accumulate cancer cells.² It simply highlights the dysfunctional function of the three doshas (humours), pitha, kapha, and vatha. Even if the exact equation of the words of the systems may not agree, certain modern names for cancer and other malignant illnesses, such as *Arbuda* and other sannipathika (humour combination) dushti (vitiation) conditions, can be comprehended in Ayurveda.

Arbuda has been studied in different Ayurvedic classics like *Susrutha Samhita*, *Charaka Samhita*, *Ashtanga Hridaya*, *Ashtanga Sangraha*, *Madhava Nidanam*, *Anjana Nidanam*, *Chakradatta*, *Yogaratanakara*, *Rasaratna Samuchayam* etc. Malignant tumours resemble kapha granthi (neoplasm). Malignant ulcer and kapha vrana (ulcer) are comparable. Oral cancer can be equated with *mukharbudam* (mouth

neoplasm). also known as *Galarbudam*, is a throat tumour that can be mistaken for oropharyngeal cancer. There are numerous types of *Sira Shulas* (headaches), each of which can be signs of a brain tumour. In the same way, there are specific varieties of *Gulma*, *Vidrathi*, *Udara*, *Pandu*, *Raktapitta*, *Athisara*, *Apachi*, etc. However, it has been shown that the majority of contemporary notions of cancer fall under the umbrella of *Arbuda*, a clinical concept that has been documented in Ayurvedic classics and is derived from a root that means "cause of death."³

As per Ayurveda, *Arbuda* is classified into 6 types; *vataja*, *pittaja*, *kaphaja*, *raktaja*, *mamsaja*, *medoja*³. The etiopathogenesis is due to *ahara-vihara* (food-regimen) causing *dusti* (vitiation) of *kapha* predominant *sannipathika dusti* the *dhatus*(tissues) especially *mamsa*(muscle) and *medas*(fat) get affected. Also, irritation and previous lesion like *musti prahara* (harming with fist), *abhighata* (injury)etc have also been acknowledged as a cause of this condition.

The significance of *vyadhi kshamatva*(immunity) in the condition of *Arbuda* is enclosed by the fact that, decreased *vyadhikshamatva* makes the condition fatal. Moreover ,the doshas becomes *gambheera*(deep-seated) and spread becomes *sarva shareera*(full body).The general *lakshanas*(signs) exhibiting by vitiating dhatus like *mamsa* etc produce *mamsa sophra* (muscle swelling) and following symptoms anywhere in the body:*vrttam*(round shape),*sthiram*(fixed to surrounding tissue),*mandaruja*(less painful in the initial stage),*mahantham*(very large size or rapid growth),*analpamulam*(deep rooted due to infiltration to the surrounding tissues),*chiravrdhi*(longer pathogenesis to manifest the disease),*apakam*(fewer tendencies towards ulceration)⁴.

As of today, the word "cancer" comes from the Greek word "Karkinos," which means "crab." Large, noticeable veins that appeared to surround the growth ringed the mass like a crab's claws. The two types of neoplasm are benign and malignant.

As per the various literature in Rasashastra some of the regular practising formulations are depicted in [Table 1-2], which can be used internally and externally.

Table 1 Rasoushadies For Abhyanthara Prayoga⁵

Rasoushadi	Mineral Ingredients
Arbudharorasa (R.R.S)	Parada(Mercury)
Hemadri Rasa (R. Chi)	Abhraka(Mica), Gandhaka(Sulphur), Kharpara (Copper Sulphate), Naga(Lead)
Kamkala Vati (Rasa Ratnakara)	Gandhaka (Sulphur), Parada (Mercury), Harathala (Arsenic)
Netrashani Rasa (Rasendra Sara Sangraha)	Abhraka(Mica), Loha(iron), Gandhaka(Sulphur)
Nityananda Rasa (R. Chi)	Audbhida Lavana (Sambhar Salt), Gandhaka(Sulphur), Hingula (Mercuric Sulphide), Kamsya (Bell Metal)
Pranavallabha Rasa (R. Chi)	Kapardika (Cowry Shell), Loha (Iron), Tamra(Copper), Tankana(Borax), Tuttha (Copper Sulphate)
Raudra Rasa (R. Chi)	Gandhaka(Sulphur), Parada(Mercury)
Maha Dravaka Rasa (B.B.R)	Kamsya (Bell Metal), Kasisa (Green Vitriol), Tuvvari(Alum), Tankana(Borax), Navasadara (Ammonium Chloride), Saindava (Rock Salt), Sarjikshara (Sodium Bicarbonate), Yava Kshara (Potassium Bicarbonate), Samudraphena (Cuttle Fish Bone), Shanka (Conch Shell), Makshika (Iron Pyrite)
Sapthamruta Loham (Chakradatta)	Loha (Iron)
Someshwara Rasa (R. Chi)	Gandhaka(Sulphur)
Trayambhakabhram (B.B.R)	Abhraka(Mica)
Thala Bhasma (B.B.R)	Harathala(Orpiment)
Thrayushanadi Gutika (B.B.R)	Harathala(Orpiment)
Yogottama Gulika (B.B.R)	Audbhida Lavana (Sambhar Salt), Bida Lavana (Ammonium Chloride)
Vajra Bhasma(Rasamrita)	Hiraka(Diamond), Rasa Sindura (Mercuric Sulfide), Manahshila (Real Agar), Gandhaka(Sulphur), Harathala(Orpiment)
Chandraprabha Guggulu (S.Y)	Bida Lavana (Ammonium Chloride)
Thriphaladi Churna(Vangasena)	Loha(iron)
Gandira Rasayana (S.Y)	Loha(iron)
Madhusnuhi Rasayana (S.Y)	Gandhaka(Sulphur)
Agni Ghritam (B.B.R)	Audbhida Lavana (Sambhar Salt), Bida Lavana (Ammonium Chloride)
Agastya Ghritam (B.B.R)	Audbhida Lavana (Sambhar Salt), Bida Lavana (Ammonium Chloride)

Table 2 Rasoushadies For Bahya Lepa⁵

Rasoushadi	Ingredients
Katakaphaladi Anjana (B.B.R)	Saindava (Rock Salt), Shankha (Conch Shell), Manahshila (Real Agar)
Haritakyadi Anjana	Manahshila (Real Agar), Anjana (Antimony Sulphide)
Shankhadi Varthi (B.B.R)	Manahshila (Real Agar), Shankha (Conch Shell)
Rasakeshwara Varthi (B.B.R)	Kharpara (Copper Sulphate), Tankana(Borax), Tuttha (Copper Sulphate), Saindava (Rock Salt)

Sudharsana Varthi (B.B.R)	Samudraphena (Cuttle Fish), Shankha (Conch Shell)
Chandraprabha Varthi(Cakradatta)	Manahshila (Real Agar), Shankha (Conch Shell)
Chandrodaya Varthi(Cakradatta)	Manahshila (Real Agar), Shankha (Conch Shell)
Chumanjana(Van gasena)	Manahshila (Real Agar), Shankha (Conch Shell), Saindava (Rock Salt)
Suryaprabha Varthi (R.R.S)	Manahshila (Real Agar)
Arbuda Lepa (S.Y)	Saindava (Rock Salt), Samudraphena (Cuttle Fish), Shankha (Conch Shell), Manahshila (Real Agar)
Upodika Lepa (Vangasena)	Saindava (Rock Salt)
Haridradhi Lepa(Vangasena)	Manahshila (Real Agar), Grihadhuma (Black Soot)

RESULT

Some of the common rasa(mineral) preparations given internally are *navajeevana rasa, kamadugdha rasa, keharuba pisthi, navapasanam, raktamritha somakalpa sinduram, pravala chandrodaya rasa, chandramritha sinduram, kapala bhasma*.⁶ Ayurvedic preparations can act as an adjuvant or a co-therapy along with chemotherapy or radiotherapy. It is also helpful in post-surgery care. Ayurvedic medicines help to minimize the side effects of these therapies. The administration of herbal and 'rasa rasayana' in the form of bhasma based medication embarked to be effective in controlling different forms of malignant growth. Malignancy which has its origin in tumors of different kinds is effectively brought under control with the dissolution of the same. It generally transforms into the shape of irregular mass to be absorbed by the circulatory system. Known elements such as gold, Sulphur, copper and zinc are made use of. Even the ashes of natural gems such as pearl, ruby and diamond are made use of in the preparation of medicines. Certain herbal drugs give excellent result in cancer cure when amalgamated with purified *parada*(mercury). Specially the *kajjali* (black sulphide) preparation having free radical scavenging, antioxidant, antimicrobial, catalytic, proenzymatic, immunomodulator activities.⁷ *Gouripashana (white arsenic), Harathala(orpiment), manahshila (real agar)* like arsenic compounds and *kajjali* induces apoptosis and prevent tumour growth.⁸

Rasa sindura, Navasadara, Tamra bhasma provides higher mitochondrial level. *Yavakshara, sarjikshara, Apamarga kshara, Palasha kshara, Audbhida lavana, Saindava lavana bhasma, pravala bhasma, Sphatika bhasma, loha bhasma* and *mandura bhasma* having tumour suppression capability. *Rajatha bhasma* considered as biogenic anti-cancerous agent and *Swarna bhasma* having higher degree of penetration behaviour, DNA damage along with inhibition of cellular proliferation. In-vitro study of *Shatputi Abhraka Bhasma* has shown significant anti-cancerous activity on prostate cells lines (Yogesh et al. 2017).⁹ Another in-vitro anticancer study of *ArkeshwaraRasa* on cells of pancreas and skin showed significant effects (Nafiuji Aman et al. 2015).¹⁰ Clinical study of *Swarna Bhasma* on solid malignancies have been proved and better response was recorded in rectal cancer group (Soumen Das et al.2016).¹¹

Rasoushadies are more effective due to their extended duration, timed and sustained release, GI absorption/stimulant, and even neurochemical irritation. While taking rasa dravyas for Arbuda patients specifically mentioned to avoid drum stick, old rice, green gram, bittergourd, pungent and non-greasy food. Avoid taking milk, all types of meat preparations, sugarcane and its products, sour, sweet and hard to digest food and abhisyanidi causing foods.

DISCUSSION

The human body generally composes of musculoskeletal system and water. The charring remnants of the musculoskeletal system is "Ash" and the ash and water both are inorganic components. *Rasaoushadhis* are recommended in minute doses/trace or ultra-trace amounts (*Alpa/Swalpa Matra*) and since these are inorganic in nature most often, they are tasteless hence not poses any problem of palatability or acceptability. Added to this the metals reduced to *bhasma*(ashes) will directly enter into the blood circulation, by surpassing the first pass mechanism, exerts its action at the target organ/areas and thereby relieves the ailments and on practising of these regimens regularly will make the body stronger. *Rasa dravyas* act as *rasayana* and strengthens normal cells and induces programmed cell death of cancerous cells. It also modulates tumor micro environment leading to reduce tumor burden. We have to ensure the standard purification of *rasa dravyas* and easy method of preparation of *rasoushadhis*. The drugs contain *gouripashana*, *harathala* and *manahshila* which all contain arsenic and the regimens to be followed are the same as taking any arsenic compounds. Arsenic is known to have anticancerous properties. *Pravala chandrodaya* having specific effect in blood related cancers as per studies.

While treating cancer patients, importance must be given to improve the mental strength of the patients. Practice *yoga* will be positively affecting their thought and mind. *Mridu shodhana* (mild cleansing) can be given. *Pathya* (wholesome diet) should be strictly adopted while doing the treatment of *rasa dravya*. Use of drugs like *kanchanara guggulu*, *patola katurohinyadi kashaya* etc are effective after the period of *rasa* intake.

CONCLUSION

Cancer treatment through ayurveda does not only focus on the area of the malignancy but on the entire system, as the whole-body crust return to harmony for the disease to be traced permanently and not reoccur elsewhere. This can be effectively done by *rasoushadhi chikitsa* (herbo mineral treatment). *Ayurveda* encompasses the use of multiple compound formulations known as *Rasa kalpas* to provide a near immediate relief. However, a detailed study is need to check the pharmacodynamic as well as pharmacokinetics of these *Rasa kalpas* to combat this deadly disease..

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