#### CONCEPT OF CANCER IN AYURVEDA

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ABSTRACT: The knowledge and management of the disease, cancer was not unknown to the ancient surgeons of India. Though the Sanskrit equivalent for this word is not found in Ayurvedic literature, diseases having the signs and symptoms similar to those of Cancer are discussed in various contexts. The present paper expounds those diseases with possible interpretations in modern system of medicine.

The word Cancer is derived from the Greek meaning 'CRAB' which was used in Medical sciences for long time as mere technical term 'CANKER' applied to eroding ulcers. This medical use of synonym was inspired by large number of prominent veins surrounding a growth suggesting a picture like claws of a crab.

W. R. Belt suggested that the terminology of cancer is used for its adherence with such obstinacy to the part i.e. like a crab and cannot be separated from each other. The identification and differentiation malignant diseases have been enlightened much later than the description available in ancient Indian literature. Earliest and foremost record could be seen in Atharva Veda, where the disease was nomenclature as "APACIT". In the later swelling at different places in the body. It does not mean that ancient Indian clinicians were unaware about the malignant diseases. They presented their views regarding cancer as a swelling superficially or situated in the deeper structure or sometimes as chronic ulcers. Such swellings or lumps as chronic

ulcers. Such swellings or lumps have been categorized under the heading of "ARBUDA", where as non-leading ulcer as "ASADHYA VRANA".

#### CLASSIFICATION

Although the present era of modern medical sciences has under gone manifold technical advancement for the diagnosis and confirmation by histopathological studies under light and Electronmicroscope, during olden days they had to depend entirely on various clinical symptomatology with Dosha theory. Considering the various lacunae in those days, the malignant diseases may be classified as follows according to the description given in different Ayurvedic text books.

- 1. Diseases which can be labeled as clear malignancy.
- 2. Diseases which may be considered as malignancy.

3. Diseases presenting symptoms similar to malignancy.

# DISEASES WHICH CAN BE LABELLED AS CLEAR MALIGNANCY

The diseases falling under this group may be further classified as follows: -

- (A) Arbuda (Neoplasia)
- (B) Asadhya Vrana (Malignant ulcer)

#### **ARBUDA**

During Vedic period "ARBUDA" was considered as a serpant like demon conquered by Lord Indra (Moniar Williams). One the other hand literary meaning of Arbuda is a lump or mass. According to the description given by Susruta (S. N. 11/10, 11). Arbudas are gradually increasing mass of big size, globular in shape, fixed with deeper structure, usually do not suppurate, giving occasional pain and can occur in any part of the body. It can involve Mamsa and Rakta due to vitiation of tridosa.

#### **Etiopathogenesis of Arbuda:**

It is based mainly on Dosic theory i.e. Vata, Pitta and Kapha. Further by Mithya Ahara and Vihara the different humors are vitiated involving different Dhatus (Mamsa, Meda, Rakta, etc). resulting in the prescription of Arubuda.

Though vitiated "Dosa" are responsible for the development of Arbuda, almost all Ayurvedic texts have given maximum importance to Kapha. Susruta has mentioned that due to excess of Kapha, Arbuda does not suppurate. S. N. 19/15, which is considered to be the common and important factor for any growth in the body.

Thus, it seems justified to postulate that excess of vitiated Kapha in the body might be responsible for the precipitation of cancer.

Irritation (S. N. 14/3) and trauma (S. N. 11/18) may precipitate or activate the formation of Arbuda. Where, for the enlargement of external genitalia, local application of certain irritable medicines have been advised. More often improper use or misuse of those drugs i.e. Linga Vridhikara Yoga has led to the development Mamsarbuda. According of Susruta, trauma is also considered to be another causative factor for the development of Mamsarbuda, where as Vagbhata has described that whenever, there is excessive formation of Mamsa Dhatu it may lead to various pathological conditions (A. H. Su. 11/10), such as Galaganda, Gandamala, Arbuda, Granthi and Adhimamsa. indicates that Mithya Ahara and Mithya Vihara probably changes local or systematic bio chemical factors (S. N. 11/13) including the haemodynamics (S.N. 11/16) leading to the origin of Arbuda.

#### **Classification of Arbuda:**

These Arbudas may be classified under the following headings:-

- 1. Types of Arbuda according to Dosa.
- 2. Types of Arbuda according to site.
- 3. Types of Arbuda according to prognosis.
- 4. Types of Arbuda according to Dhatu (tissue).

# Arbuda according to dosha:

Based on dosas Sushruta has differentiated the Arbudas into (S. N. 11/25 and S. U. 22/9) four types.

- 1. Vataja
- 2. Pittaja
- 3. Kaphaja, and
- 4. Tridosaja

This indicates that probably there are four main doshas or humors playing an important role after vitiation or derangement which may be low or high in comparison to other humors to precipitate the malignant growth in the body. Extreme divertion of dosa's, may lead to fatality. Such variations in different types of Arbuda can be diagnosed or labeled as Vataja, Pittaja, Kaphaja, based on their symptomatology. Those Arbudas having mixed symptoms of all the three humors, can be labeled as tridosaja. However, to establish or label the particular types or dosaja Arbuda, require detailed fundamental advancement in the field of Ayurveda.

# Arbuda according to dhatu (tissue or cells):

This indicates that ancient Indian clinicians were aware of the involvement of different tissue either primarily as local factor or generally by derangement of doshic factors. According to Susruta's description in Nidana Sthana, Dhatus are involved in Arbuda i.e. three types of dhatus.

- 1. Medaja Arbuda (fatty tissue)
- 2. Mamsaja Arbuda (muscular tissue)

#### 3. Raktarbuda (blood)

However, a vivid description is also available where Asthi (Bone) has also been involved to give rise to swelling like Arbuda described as 'Adhyasthi", but not as Asthyarbuda. Further Asthi Kshaya if localized to some particular portion resembling pathological fracture or osteoclastic destructive change in the bone may also be included in Asthyarbuda.

### Types of Arbuda according to sites:

According to Susruta, Arbuda, can occur at any site or tissue of the body and probably no site is exempted, which cannot give rise to Arbuda. This include eye, ear, nose, buccal cavity separately such as Vartmarbuda (eye lid), Karnarbuda (ear), Nasarbuda (Nose), Taluarbuda (Palate), Jalabuda and Ostharbuda (Lip), Galarbuda (Throat), Mukharbuda (Buccal mucosa) and Sirarbuda (Tumors of head or brain).

Apart from the above mentioned site, genital organ has also been included under the nomenclature of "Suka Dosa". This includes two types of Arbuda i.e. Mamsarbuda and Sonitarbuda which is precipitated due to misuse of various types of 'Linga vrddhikar Yoga'.

## Types of Arbuda according to prognosis:

Based on the prognosis of the different types of Arbudas described in Ayurvedic text books, they can be placed under two categories:

- 1. Sadhya
- 2. Asadhya

Most of the Arbuda' including Mamsarbuda, Raktarbuda and Tridoshaj of any site occurring in ear, nose, throat etc. are considered as Asadhya (incurable). However, some of the Arbudas are also described as Sadhya which are most probably cyst, benign tumours or chronic inflammatory swelling.

#### **Recurrence and metastasis:**

At an interval or period of time of Sadhya Arbuda may develop into Asadhya i.e. from one stage to the other or Asadhya Aruda may give rise to its spread to another place which may be called as metastatic stage. Such pathogenesis of malignancy has been described in Ayurvedic text books as "Adhyarbuda" or "Dvirarbuda". This most probably suggests the recurrence and metastasis of tumours to distal places.

When Arbuda is appearing at preexisting site or nearby primary growth it is called as Adhyarbuda (recurrence), whereas when a couple of similar types of growth occurring at different places, following one after another it is called "Dwairbuda" i.e. metastasis.

### Asadhya vrana (malignant ulcers)

Asadhya Vrana may be due to a number of causes and malignancy cannot be ruled out as one of them. Almost all clinical presentation of different Asadhya Vrana described by Susruta can be considered under malignant ulcers. According to Susruta these ulcers are chronic in nature and depicts with raised or rolled edges, multiple firm fleshy masses similar to cauliflower type with various types of Sometimes these ulcers also discharges. presents some general symptomatology i.e. painful respiration, Anorexia, chronic cough, Cachexia etc. suggesting the stage or spread of cancer to other places (Metastatis).

# Diseases which may be Considered as Malignancy

This includes particularly those diseases which are labeled as Asadhya alongwith certain manifestations similar to malignancy. Those are Mamsaja Ostha, Alasa, Mamsa Kacchapa, Galaudha, Asadhya Galaganda, Tridosaja Gulma, Asadhya Vrana, Lingarsa etc.

Mamsaja Ostha: This is an incurable disease of lips which becomes heavy, thick protruding fleshy mass and developing ulcers occasionally. Such lesions of the lips can be considered as exophytic lesion (Acerman's Cancer).

Alasa: Due to vitiation of Rakta and Kapha there is a deep seated swelling under the surface of the tongue. It increases gradually in size, with fishy odour discharge and destroys the surroundings structures. Such types of diseases resembles Adenocystic and Mucoid epidermoid tumours of salivary glands.

Mamsa Kacchapa: Due to vitiation of Kapha, a big swelling develops on the palate which is painful, increases gradually in size and is incurable. This resembles a tumour of hard palate.

Galaudha: Similar to other diseases this diseases develops also due to vitiation of Rakta and Kapha. In this disease an extensive swelling occurs in the throat obstructing both the passages of oesophagus and trachea, with the result, that patient develops difficulty in swallowing and also in respiration which becomes fatal to the patient. A malignant growth at oropharynx may give all these symptomatic features.

Asadhya Galaganda: Galaganda or thyroid enlargement of long duration having complications like anorexia, weakness, hoarseness of voice and not responding to prescribed medical therapy may be considered as carcinoma of thyroid gland.

Asadhya Gulma: In Asadhya Gulma which are gradually increasing in size, wide spreaded and fixed with tortoise like mass in the abdomen, the skin over mass shows engorged veins. In addition, patient may suffer cachexia, cough, vomiting, fever etc. These features are probably suggestive of intra abdominal malignant growth.

**Asadhya Udara Roga:** When ascitis is associated with flank pain, marked anorexia, sometimes diarrhea, weakness and reappearance of fluid after aspiration it resembles malignant ascitis.

Lingarsa: Vitiated dosa lodged in the external genetalis affect the local musculature etc. and give rise to itching which gradually become ulcerated. These ulcers give rise to the growth of fleshy mass with discharge. blood closely symptomatology resembles papillary carcinoma.

# Diseases Where Malignancy cannot be ruled out

Apart from the various factors mentioned earlier, there are certain other symptomatology or the diseases which are also considered as 'Asadhya' and labeling them under malignancy seems to be a controversial subject. However, it is also difficult to rule out the possibilities of malignancy based on their sign and symptoms. Those diseases are Tridoshaja Nadi Vrana, Asadhya Pradar a Asadhya Kamala and Carmakila etc.

**Tridosaja Nadi Vrana:** S. N.- 10/13: These are the chronic discharging sinus occurring at different places of the body and may produce burning sensation, dyspnoea, insomnia, mental confusion with different types of discharge and usually this discharging sinus or nadivrana are found in the cases of fistula – in – ano, chronic osteo myelitis, actinomycosis etc. Though diseases are not malignant but many times a carcinoma of the anal canal may produce a similar symptomatology.

Asadhya Pradara – Madhavana – 61 / 4, 5: This is the condition where excessive vaginal discharge of various colour, consistency and odour are observed. Patient gradually loses her appetite, weight and become emaciated. Such symptomatology may be considered as carcinoma of the uterus.

Asadhya Kamala – Madhavan – 8/19. 20: This is the condition where a gradually increasing jaundice with or without pain is observed and has been described as an Asadhya Roga. Though such conditions can be observed in chronic cirrhosis or due to obstructive path in biliary tract, such as impaction of stone is common bile duct etc. But these conditions are not malignant. However, similar symptomatology can also be considered or manifests in malignancy of the biliary tract or head of the pancreas or in carcinoma liver, obstructing biliary out flow to duodenum.

All these studies indicate the awareness of malignancy during ancient Indian / Clinicians period including its etiopathogenesis, types, sites, stages and spread. It also supports the views that solution of etiopathogenesis can be studied in detail by enlightening the Dosa, and Dhatu. In addition the study on prakrti of these cases in relation to various Dhatu's

factors, may enable to find out some definite pathogenesis and criteria of diagnosis (under study). Apart from this an elaborate description is also available regarding the concept of management of this diseases in Ayurveda. A detailed study on this aspect may give new light to the suffering humanity throughout the world.

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