

‘CANCER’- An Emerging Problem of Modern Era and its Pathophysiological Correlation with Diseases in Ayurveda.

Dr.Gauri R. Hukkeri.

PG Scholar, Kaumarbhritya Dept, LRP College, Islampur, Sangali, Maharashtra, India

Email: - gaurihukkeri4@gmail.com, Contact no: - 8600673556

Dr.sanskriti Mirashi

Guide; MD (Kaumarbhritya), Sangali, Maharashtra

Abstract:

According to National Institute of Cancer Prevention and Research (NICPR) an estimated 2.25 million people in India live with cancer and many more new cancer patients registered every year¹. This emerging problem Cancer is nothing but the disease that results when cellular changes cause the uncontrolled growth and division of cells; this can result in tumors and damage to the immune system and other impairment.²

The knowledge and management of the cancer was not unknown to the ancient science like ayurveda, though the exact Sanskrit equivalent for this word is not found in Ayurvedic literature, but diseases having the signs and symptoms similar to those of cancer are discussed in various samhita. Pathophysiology of those diseases are very similar to what mentions in ayurvedic samhita. This present paper lights on those diseases and its correlation with malignancy symptoms and etiopathogenesis of cancer in present modern era.

Keywords:-Cancer, *Ayurveda samhita*, Diseases like Arbud, Apachi, Pathophysiological correlation,

Introduction

Cancer is an emerging problem of modern era. According to National Institute of Cancer Prevention and Research (NICPR) an estimated 2.25 million people in India live with cancer and many more new cancer patients registered every year¹. There are over 200 types of cancer, anything that may cause a normal body cell to develop abnormally potentially can cause cancer; general categories of cancer related or causative agents are as follows:-Chemical or toxic compound exposure, ionizing radiation, some pathogens and human genetic. Cancer symptoms and sign depend upon specific type and grade of cancer; although general sign and symptoms are not very specific; which are namely; fatigue, weight loss, pain, skin changes unusual bleedeing,cough,voice change, fever lumps or tissue masses³.

The knowledge and management of the disease, cancer was not unknown to the ancient science like ayurveda, though the exact 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 samhita. Pathophysiology of those diseases are very similar to what mentions in ayurvedic samhita. The etiological factors according to modern science somehow correlate with the changes in *Ahar-Vihar* which precipitate the risk of cancer.

In Ayurvedic literature; according to *Sushrut Samhita* cancer is described as non-inflammatory swelling as ‘*Arbud*’ and according to *Charak samhita* as inflammatory swelling as ‘*Granthi*’⁴ According to Ayurveda our body consist of *trayo-dosha* namely; Vat, Pitta, Kapha; for normal functioning of body they should be under control their distortion can lead to diseases.⁵ In malignancy all three dosha are went out of control and their (*Samsthiti*) equilibrium hampers lose their mutual coordination disturb *Dhatu*s and resulting in to metabolic crisis.

Material and Methods

The materials were collected from the classical Ayurvedic literatures, magazines and research journals.

Classical Description of Diseases which can be correlates with malignancy:-

In Modern era there are various laboratory investigations available to find out hemodynamic changes, histopathological changes during malignancy. In ancient time only clinical symptomatology was ultimate tool to diagnose and confirm the disease. As distortion of *trayo-dosha* with involvement of *dhatu* (*tissues*) and their mutual reaction can result in to disease⁶. Considering those limitations; disease which can be symptomatology correlate with malignancy explained in different *samhitas* as *Arbud*, *Granthi*, *Gulma*, *Asadhya Vrana*, etc. Their pathophysiology and etiology can be correlate with current malignancy symptoms and causes.

I. ARBUDA:-

“गात्रप्रदेशे क्वचिदेव दोषाः समूर्छिता मांसमसृक् प्रदूष्य |
वृत्तं स्थिरं मंदरुजम महान्तमनल्पमूलं चिरवृध्यपाकम |
कुर्वन्ति मंसाश्रयमत्यागाधं तदर्बुदम शास्त्रविदो वदन्ति”⁷

Arbuda is a lump or mass. According to the description given by *Madhav Nidan*: Arbuda are big size, still, globular in shape, fixed with deeper structure, chronic in origin usually do not suppurate, giving mild pain and can occur in any part of the body. It can involve *Mamas* and *Rakia* because of imbalance of *trayo-dosha*.

Pathophysiology of Arbuda and its relevance with malignant tumor:-

It is result of distortion of *trayo dosha-Vat, Pitta, Kapha* caused by *Mithya Ahara* and *Vihar* as the main etiological factors results in vitiation in *Dhatu*s (*Mamsa, Rakta*, etc.) resulting in *Arbuda*. All three *Doshas* *Vat, Pitta, and Kapha* are responsible for *Arbuda*, but major *dosha* responsible for *Arbuda* formation is *Kapha*. Because of excess of *Kapha*, *Arbuda* does not suppurate⁸ responsible for growth in body which is chronic in origin, therefor excess of vitiated *Kapha* develops malignancy.

In etiological factors of Cancer; sanitary life style and excess junk food, lack of exercise Accumulates excess Kapha Dosh with excess amount of stress and irregular sleep pattern and vitiation of three Doshas precipitate risk of cancer; can be correlates with modern etiological factors of cancer which indicates that *Mithya Ahara -Vihar* brings out change in systemic dynamics as well as hemodynamics of body hampers immunogenicity of body and results in to tumor. According to *Sushruta Samhita*, trauma is also considered as etiological factor for the development of Mamsarbuda, while according to *Vagbhat Samhita* excessive production of mams dhatu can lead to disease as Arbuda, Granthi and Adhimamsa⁹.

Classification of Arbuda:-

Sr.No.	Classification of according to dosha involvement	Classification of according to dhatu involvement	Classification of according to sadhyasadhytwa(prognosis)
1.	Vataja	Medaja Arbuda	Sadhya.
2.	Pittaja	Mamsaja Arbuda	Asadhya
3.	Kaphaja	-	-
4.	Tridosaja	-	-

It can be classified according to dosha involvement: which may be low or high in comparison to other Doshas to precipitate the malignancy; different types of Arbuda can be diagnosed or labeled as Vataja, Pittaja, Kaphaja, based on their predominance of respective doshas.while having mixed symptoms of all the three dosha is called Tridosaja Arbuda. However, to correlate with types of malignant tumor it require excellence research in ayurvedic fundamental principle.

According to *Sushruta Samhita*, Arbuda, can occur at any site of the body and hence nowadays tumor can arise from any site of body as Lymphoma, Myeloma, Sarcoma etc. or brain). Apart from concept of *Shuka Dosa* also mentioned in *Sushruta Samhita*; includes Mamsarbuda and Shonitarbuda which is developed because of misuse of '*Linga vrddhikar Yoga*'¹⁰.

Classification of Arbuda according to its (Sadhyasadhytwa) Prognosis a). Sadhya b). Asadhya. Arbuda which are Tridosaja occurring in upper region like nose, throat etc. are Asadhya. While Sadhya which are benign tumors or chronic inflammatory swelling.

So can be correlate with begin and malignant tumor. At any stage if left untreated begin tumor can convert into malignant tumor. As per the symptoms Vataja Pittaja Kaphaja Medorbud can be considered as benign tumor and Raktarbuda, Mamsarbuda considered as Malignant Tumor.

Metastasis of tumor:-

There is clear reference of metastasis of Arbuda in ayurveda samhitas; which explained like *Adhyarbuda* or *Dvirarbuda*¹¹. When Arbuda is appearing at preexisting site called as

Adhyarbuda can be correlate with recurrence of tumor and when a tumor happening at different site distal from primary site called as *Dwairbuda* can be correlate with metastatis of the diseases.

II. Asadhya Vrana (Incurable Wound):-

According to Sushrut Samhita; All clinical presentation of Vrana like Chronic in nature, painful, hard, thin, cold pus secretions cauliflower type fleshy mass, with raised edges with general symptomatology i.e. Dyspnoea, cough, Apnea, Anorexia etc. which indicates spread of cancer to other places (Metastatis)¹².

Almost all the clinical presentation resembles with malignant ulcer.

III. Asadhya Galgand (Thyroid Enlargement):-

Galgand or Thyroid enlargement chronic in nature presented as weakness, anorexia, weight loss, and voice hoarseness and not responding to medications called Asadhya Galgand¹³.

Almost all clinical presentations similar to Carcinoma of Thyroid.

IV. Asadhya Gulma :- (Abdominal Malignancy)

Gulma is called as Asadhya when it has enlarged in size and skin over abdomen shows engorged veins and presented as tough mass over abdomen like *kachapaprushth* like tortoise also the general symptoms like cough, anorexia, vomiting, fever are there¹⁴.

Almost all clinical presentations similar to Intraabdominal Carcinoma.

V. Mamsaja Osta:- (Acerman's Cancer)

Mamsaja Osta is Asadhya disease of Osta i.e. lips which presented as multiple ulcers which are incurable in nature, protruding mass, painful lesions.

Almost all clinical presentations similar to Acerman's Cancer¹⁵.

VI. Galaudha :- (Carcinoma of oropharynx)

In this diseases mass occurs at throat hence by obstruct the both passage of esophagus and trachea results in to dysphagia and dyspnea which becomes life threatening, almost all clinical presentation similar to carcinoma of oropharynx¹⁶.

Etiological Correlation of Cancer as per Ayurveda:-

Various etiological factors of cancer as per modern life style includes cigarette smoking, alcohol, smoking, stress, obesity, processed food, infections and immunity alterations and many more carcinogens which alter DNA mutation and brings out carcinogenic changes¹⁷.

As per ayurveda; Cancer is due to vitiation in *trayo-dosha* due to *Mithya ahar Vihar*. Lifestyle alterations responsible for vitiation of Doshas and producing cancer causing pathology.

Factors responsible for distortion of Doshas:-

1.	Vata	Stressful conditions, Dry foods, Packed Food, Excessive intake of bitter, pungent, astringent product.
2.	Pitta	Excessive Anger, Oily fried high calorie food, Excessive intake of sour and salty food.
3.	Kapha	Sedentary life style, Lack of exercise, sweet, oily food
4.	Rakta	Excessive Anger, Emotional stress, Working near very hot conditions, Alcoholic beverages, Excessive intake of fried sour food
5.	Mamsa	Diwaswap (sleeping during the day), overeating, excessive use of yogurt, cream, milk etc.
6.	Meda	Lazy life style, Lack of exercise, Excess intake of oily food, sweet, Alcoholic beverages

Conclusion

In this present paper, it can be concluded that the etiopathogenesis of cancer as per modern can be correlate with ayurvedic principle, there was awareness of malignancy at that time including its pathophysiology, etiology and treatment. There are many factors responsible for cancer, modifiable factors like diet, life style which helps in maintaining dosha equilibrium can definitely reduce the risk of the cancer. By applying the principles of ayurveda science can understand the disease in another aspect may give a new ray of hope for cancer suffering.

References:-

1. National Institute Of Cancer Prevention And Research, (NICPR) www.nicpr.res.in
2. Definition/Cancer/www.webmd.com
3. K George Mathew, Praveen Aggarwal, Fifth Edition, Relax India Private Limited, Chapter 13.
4. Sharma P.V. Sushruta Samhita. Vol. II. Edition 2010. Varanasi. Choukhamba Bharati Academy. Su/Ni/11.
5. Murthy Srikantha K.R. Astanga Hridayam. Vol. III. Edition 1995. Varanasi. Krishnadas Academy. As.Hr./Su.1/6-7

6. Murthy Srikantha K.R. Astanga Hridayam. Vol. III. Edition 1995. Varanasi. Krishnadas Academy. As.Hr./Su.1/6-7
7. Madhukosh vyakhya by shri Chandunanadan Upadhyay 2004 Madhavnidan Choukhamba Prakashan Varanasi, Ma/Ni/Galgand 18-19
8. Sharma P.V. Sushruta Samhita. Vol. II. Edition 2010. Varanasi. Choukhamba Bharati Academy. Su/Ni/19-15.
9. Murthy Srikantha K.R. Astanga Hridayam. Vol. III. Edition 1995. Varanasi. Krishnadas Academy. As.Hr./Utt/29-1
10. Sharma P.V. Sushruta Samhita. Vol. II. Edition 2010. Varanasi. Choukhamba Bharati Academy. Su/Ni/11-18
11. Sharma P.V. Sushruta Samhita. Vol. II. Edition 2010. Varanasi. Choukhamba Bharati Academy. Su/Ni/11-20
12. Sharma P.V. Sushruta Samhita. Vol. II. Edition 2010. Varanasi. Choukhamba Bharati Academy. Su/Su/23-12
13. Madhukosh vyakhya by shri Chandunanadan Upadhyay 2004 Madhavnidan Choukhamba Prakashan Varanasi, Ma/Ni/Galgand /7
14. Madhukosh vyakhya by shri Chandunanadan Upadhyay 2004 Madhavnidan Choukhamba Prakashan Varanasi, Ma/Ni/Gulma /18-19
15. Sharma P.V. Sushruta Samhita. Vol. II. Edition 2010. Varanasi. Choukhamba Bharati Academy. Su/Ni/16-10.
16. Murthy Srikantha K.R. Astanga Hridayam. Vol. III. Edition 1995. Varanasi. Krishnadas Academy. As.Hr./Utt/21-48.
17. <http://www.allboutcancer.fi/facts-about-cancer/what-causes-cancer>