

ETIO-PATHOLOGICAL APPROACH OF CANCER IN AYURVEDIC AND CONTEMPORARY SCIENCE w.s.r to SROTAS INVOLVEMENT- A HYPOTHESIS

Kanchan Agrawal¹, S.R.Saley²

¹P.G.Scholar, Department of Rognidan, Government Ayurvedic College, Nanded, Maharashtra, India

²Guide, Professor and Head of Department, Department of Rognidan, Government Ayurvedic College, Nanded, Maharashtra, India

Email: kanchan.agrawal1@gmail.com

ABSTRACT

Cancer is the second most common cause of death in the western world. It accounts for about 25% of death. Cancer is a disease of varied etiology and involves a wide variety of clinical syndromes. The basic underlying pathological phenomenon is deorganized excessive uncontrolled division of cells resulting into impairment of function of the relevant organs ultimately leading to mortality. Advancement in medical science has not yet found definite cure for it. The Exact description of a condition similar to cancer is not found in *ayurveda* text. However the clinical features of *granthi*, *arbud*, *vidradhi* share some aspects of cancer. Cancer is *tridoshaj* but main *doshas* involved in it are *kapha* & *pitta*, *rasa* & *rakta* are *dushaya* involved. The other *dosha*, *dushya*, *dhatu* & organ are also involved in the relevant cancer. Treating cancer related to *rasavaha* & *raktavahasrotas* like CA of liver, leukemia, liver metastasis is a great challenge to ayurveda due to their bad prognosis.

Keywords: Cancer, *Arbuda*, *Rasavahasrotas*, *Raktavahasrotas*

INTRODUCTION

Oncology derives in part from the greek *konkos* (mass, tumor) and describes the study of malignant disease. The word cancer is derived from the greek meaning "CRAB" which was used in medical term CANKER applied to eroding ulcers, means by large no. of prominent veins surrounding a growth suggesting a

picture like "claws of a crab". Earliest & foremost record could be seen in "*atharvaveda*", where the disease was nomenclature as "*Apachit*" in the later swelling at different places in the body.⁽¹⁾The classics describes about both *granthi* (tumour) and *arbuda* (cancer). The classification of neoplasm depends on

various *lakshanas* (symptoms) in relation to *tridoshas* (*vata*, *pitta*, *kapha*) in *Ayurveda*. The condition that can be named as malignant includes both *arbuda* and *granthi*, forex. The *raktarbuda* mentioned in the classicscan be correlated with leukemias, *mansarbuda* as melanoma and *mukharbuda* as oral cancer etc⁽²⁾The oldest treatment for malignancy is surgery, but there is now an increasing range of non-surgical treatment, encompassing both radiotherapy (clinical oncology) and drug treatment (medical oncology). It is the 2nd most common cause of death in the western world.⁽³⁾

AIM:

Etiopathological approach of *srotas* involvement in cancer according to *Ayurveda*.

OBJECTIVES:

1. To study etiopathological approach of cancer in *Ayurveda*.
2. To study etiopathogenesis of cancer in contemporary aspect..
3. To study *srotas* involvement in cancer according to *Ayurveda*.

MATERIAL & METHODOLOGY

EPIDEMIOLOGY: ⁽⁴⁾

Understand the causes of cancer by examining patterns of distribution of causes by age, sex, other illness, social-class, geography and so on, same time these gives strong pointers to the molecular or cellular causes of the disease, such as, the association between aflatoxin production within contaminated food supplies and certain p53 gene mutations in hepatocellular carcinoma.

ETIOLOGY⁽⁵⁾

- | | |
|------------------------------|----------------------|
| 1. Age | 7. Immunosupression |
| 2. Alcohol | 8. Infectious agents |
| 3. Cancer-causing substances | 9. Obesity |
| 4. Chronic inflammation | 10. Radiation |
| 5. Diet | 11. Sunlight |
| 6. Hormones | 12. Tobacco |

ETIOPATHOGENESIS OF CANCER ACCORDING TO CONTEMPORARY ASPECT:⁽⁶⁾

Two characterstic factors define a cancer –

1. Unregulated cell growth
2. Tissue invasion/ Metastasis

Unregulated cell growth without invasion is afeature of benign neoplasm, or new growths. Cancer is a synonym for malignant neoplasm. Cancers of epithelial tissue are known as carcinomas. Cancers of non-epithelial (mesenchymal) tissues are called sarcomas. The malignant phenotype often requires mutation in several different genes. Cancer cells generally retain the capacity to proliferate by acquiring mutations in cell cycle regulatory genes. Often mutation activates cell pathways leading to proliferation and block pathways of differentiation. The normal cell has protective mechanisms that lead to the repair of cell damage; these repair pathways are often abnormal in cancer cells. When a normal cell has sustained too much damage to repair, the cell activates a suicide pathway to prevent damage to the organ. These cell death pathways are also commonly altered in cancer cells, leading to the survival of damaged cell that would normally die.

PATHOPHYSIOLOGY :⁽⁷⁾

Exposure to carcinogens & taking incompatible food



Initiation of carcinogenesis

Constant & chronic irritation release excessive free radicals, causes DNA damage results in genetic alterations



Hyperplasia

(Increased cell multiplication leads to thickening of the tissues-reversible stage)



Metaplasia

(abnormal appearance of a tissue at a wrong site – reversible stage in most cases)



Neoplasia

(can be cured by surgical removal, and this stage is not reversible and is often precancerous)



Carcinoma in situ

(locally invasive stage of cancer not spread elsewhere, and which may be curable by resection, this stage is not only irreversible but also very prone to development of next stage, highly invasive cancer)



Metastasis due to angiogenic factors

CANCER IN AYURVEDA :⁽⁸⁾

The exact description of a condition similar to cancer is not found in *ayurveda* text. However the clinical features of *granthi*, *arbud*, *vidradhi* share some aspects of cancer. Cancer is *tridoshaj* but main *doshas* involved in it are *kapha* & *pitta*, *rasa* & *rakta* are *dushaya* in-

involved. The other *dosha*, *dushya*, *dhatu* & organ are also involved in the relevant cancer. Treating cancer related to *rasavaha* & *raktavahasrotas* like CA of liver, leukemia, liver metastasis is a great challenge to *ayurveda* due to their bad prognosis.

PATHOLOGY OF ARBUDA ACCORDING TO AYURVEDA :⁽⁹⁾

Nidansevan



Accumulation of *doshas* (*kapha* & *pitta*)

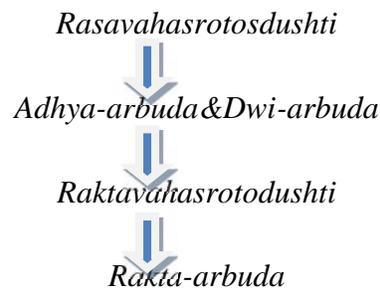


Impairment of *agni*



Formation of *aam*





SITE OF ACTION OF RASAYANA DRAVYAS:⁽¹⁰⁾

Rasayan therapy is one of the eight specialty branches of classical *ayurveda*, designed to promote molecular nutrition in the body through provision of richer nutrients, enhanced digestive and metabolic activities, optimized microcirculation and tissue perfusion leading in turn to better qualities of cells and tissues.

Rasayan effect seems to operate at three complementary levels :⁽¹¹⁾

1. At the level of *agni*
2. At the level of *rasa*
3. At the level of *srotas*

DISCUSSION

Rasavaha & Raktavahasrotas are *adhyadhatus* any deformity in these *srotas* will lead to further destruction of next *dhatu*s.

Rasavaha & Raktavahadhatus have *chalguna* (spreads throughout the body) that's by if any harmful substance mix with them it goes to all over the body very quickly.

RESULT

As *mansavaha* and *medovahasrotas* are important *srotas* for cancer development but via a above description the result comes in front of us that *rasavaha & raktavahasrotas* plays an

important role in cancer development especially in malignancy.

CONCLUSION

As we discuss all about *rasavahasrotas & raktavahasrotas*, it concludes that if we treat these two *srotas* in any type of *arbuda* than satisfactory results will be seen.

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