



Nidan-Vichar (Etiopathogenesis Concept) In Ayurveda In Context To Cancer

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Abstract:

Ayurveda, the holistic system of medicine has strong basic concepts and fundamentals. *Hetu* (Causative factor), *Linga* (Symptomatology) and *Aushadha* (Treatment) are the three major components of whole treatment of any disease. The diagnosis in Ayurveda is not always in terms of the name of a disease, but is in the form of a description of the disease process depicting the pattern of vitiation of *Doshas* and *Dushyas*, the organs or *Srotas* involved. Acharya Charaka rightly proclaims that neither it is necessary nor it is possible to give name to every disease. What is necessary is to understand the exact nature of the disease process. The term Cancer is not found in Ayurveda directly, but it is possible to diagnose and manage the Cancer patients.

This paper is an attempt to understand the *Nidan vichar* i.e. Etiopathogenesis concept in Ayurveda for the diagnosis of a disease in context to Cancer. The same fact will be explained with the example of Cancer of female reproductive system. It also provides the Ayurvedic treatment approach and prevention of Cancer.

Key words – Ayurveda, *Nidan-Vichar*, Etiopathogenesis, Cancer, Female Reproductive System

Introduction

Cancer is a very threat full condition all over the world. Cancer incidence is increasing at an alarming rate. Worldwide, an estimated 19.3 million new cancer cases and almost 10 million cancer deaths occurred in 2020. The global cancer burden is expected to be 28.4 million cases in 2040, a 47% rise from 2020.^[1] Everyone knows that it is due to DNA damage but still unknown how this DNA damage occurs. However the cancer remains without a cure unless it is detected at a very early stage. Therefore researcher & scientist are turning to Ayurveda as an alternative therapy for cancer cure.

Ayurveda has strong basic concepts and fundamentals. *Hetu* (Causative factor), *Linga* (Symptomatology) and *Aushadha* (Treatment) are the three major components of whole treatment of any disease,^[2] like cancer also. As mentioned by Acharya Charaka "*na hi sarva vikaranam namo asti* " means exact nomenclature is not necessary for all the diseases.^[3] It insists on diagnosis of constitutional status of the disease.

Patient comes to the physician with symptoms, on the basis of that, physician should think backward to the etiopathogenesis in terms of *Doshas*, *Dhatus*, *Malas*, *Srotas* and *Agni* involved in its manifestation. After deciding the nature of disease, physician should prescribe medicine according to them.

Ayurvedic approach to disease diagnosis

Diagnosics approach -

1. **Doshas**- According to symptoms, analyze which *Doshas* are affected- *Vata, Pitta, Kapha, Rajasa* or *Tamas*. After that analyze the stage of each *Dosha* as-
 - a. *Vruddhi / Kshaya / Prakopa*-vitiated / *Prasara*
 - b. *Anshansha Kalpana*- Way of aggravation and vitiating of *Doshas* i.e. by which *Gunas*, particular *Dosha* is vitiating
2. **Dushyas**- Analyze which *Dhatus* and *Malas* are affected i.e. *Rasa, Rakta, Mansa, Meda, Asthi, Majja, Shukra, Mutra, Purish, Sweda* and other vitiating factors like *Oja, Kleda etc.*
3. **Avastha**- Analyze *Sama / Nirama* state of *Doshas* and *Dushyas*
4. **Adhishthana**- Analyze the site of manifestation of disease i.e. *Strotas*.
5. **Samprapti**- Analyze the way of manifestation of disease and *Strotodushti* like- *Atipravrutti*- hyperfunction, *Sanga*- obstruction, *Sira granthi*- nodules, tumours or new growth, *Vimarga gamana*- diversion.
6. **Agni**- Analyze the state of *Agni as Manda, Tikshna or Visham*.

Treatment approach-

1. **Nidan-parivarjana** - The first line of treatment is removal of the causative factors.
2. **Dosha-pratyanik chikitsa** - After knowing which *Dosha* is vitiating by which *Gunas*, the drugs of opposite *Gunas* can be used.
3. **Dhatu pratyanik chikitsa** - After knowing which *Dhatu* get affected by vitiating *Doshas*, the drugs of opposite *Gunas* of *Dhatu* can be used.
4. **Apatarpana chikitsa** - *Amadosha* is predominantly treated by *Amapachak* drugs.
5. **Shodhana chikitsa** - First all *Doshas* are brought into *Niramavastha*, then only *Shodhan* or purifying measures are implemented.
6. **Santarpana chikitsa** is advised for *Nirama avastha*.
7. **Vyadhi pratyanik chikitsa** - Identification of *Adhishthana* of a disease is important for launching specific disease oriented therapy i.e. *Vyadhi pratyanik chikitsa* in accordance with the concept of *Dravya Prabhav* irrespective of *Dosha* and *Dushya*.

Cancer in Ayurveda

Pathogenesis in Ayurveda is explained on the basis of *Tridoshas*. *Arbuda, Granthi, Gulma* which can be similar to the cancer term but they are not directly mentioned as cancer, their signs & symptoms are similar to that of cancer.

Out of all the varieties (i.e. *Vataja, Pittaja, Kaphaja, Mamsaja, Medoja, Raktaja*), *Raktaja Arbuda* resemble malignant tumor. Certain other types as- *Sharkarbuda, Adhyarbuda & Dwirarbuda* are described by Acharya Sushruta.^[4] It can be said roughly that *Adhyarbuda* suggests recurrence, while *Dwiradarbuda* suggests metastasis.

According to Amarkosha, *Arbuda* is a disease which grows very fast and causes either destruction of local tissues or body parts or even death. *Arbuda* have predominance of *Meda* and *Kapha*, *Vata* being responsible for cell division, aggravation of *Vata* resulting in proliferation. It is included in disorders due to vitiating of *Mamsa, Rakta* and *Meda*. It is a disease of vitiating of *Mamsa*, i.e. *Mamsavaha srotasa*.

Common Etiology of Cancer

It reveals the *Dushti-Hetu* of *Raktavaha, Mamsavaha, and Medovaha Srotasa*-^[5]

- Meat and excessive alcohol, smoking, tobacco are coming under *Vidahi Anna*.
- Meat, eggs and milk products with high fat content produces carcinogens like azaserine etc. comes under *Abhishyandi, Snigdha* and *Guru Anna*.
- Sunbathing or working under high exposure to Sunlight, Ionizing radiation, certain chemicals, X-ray radiation or near fire and hot conditions (*Atapa-anala* group).
- Lack of physical activity or obesity- (*Avyayam* group).

- Growing older (*Vata prakopa*), low immunity (*Ojo-kshaya*), certain hormones, some viruses, bacteria and other microbes like HPV etc. are comes under *Agantu hetu*.
- Genetic factor- Genetic mutation and DNA damage comes under *Bija-dosha* and *Daiva*. Only about one percent of cancers are unmistakably inherited. However, the vast majority of cancers are attributable to above mentioned environmental risk factors.

Pathogenesis

Aggravated *Doshas* vitiating *Mamsa*, getting localized in any body part, produce a local swelling of deeply situated *Mamsa* due to its accumulation.^[4]

Atipravrutti, *Sanga*, *Siragranthi* and *Vimarga-gaman* type of *Strotodushti* occurs in cancer. The decrease in *Agni* leading to *Ama* formation. This *ama* obstruct the channels of circulation i.e. *srotasas*, result in overflow of the tissue nutrients in the opposite direction which may result in excessive tissue growth like nodules (*Granthi* and *Arbuda*). Diversification of the flow of strotas in an entirely different direction is also one of the possibilities.

Treatment for cancer as per Ayurveda-

Purifying or cleansing the blood and blocked channels with Panchakarma i.e. *Shodhana chikitsa* and with Ayurvedic herbal formulae i.e. *Shamana chikitsa*. Use of *Visha-dravyas* which has *Ashukari* property for this fast growing disease. *Mamsavaha strotas chikitsa- Shastra*, *Kshara* and *Agni karma*. In addition, Ayurvedic *Rasayana* or strengthening and rejuvenating therapy is quite beneficial.

Role of Ayurveda in many ways like-

- Preventing cell damage through traditional ingredients (which contain antioxidants) such as Turmeric, Guduchi, Ashwagandha, Amla, Neem, Triphala, etc.
- Minimising the severe side-effects of aggressive chemo and radiation therapies.
- Exercise, Yoga and Pranayama performed regularly, provide an energy boost and also strengthen our immunity.
- Ayurveda can be used as a co-therapy with the chemotherapy and radio therapy.
- It is used for post surgery support, to prevent cancer cell's proliferation, to cure the tumors.

Cancer of Female Reproductive System

Here take an example of Cancer of Female Reproductive System. They can be diagnosed as per their signs & symptoms and can be treated according to them. Cancers can occur in any part of the female reproductive system—the vulva, vagina, cervix, uterus, fallopian tubes, or ovaries. These cancers are called gynecological cancers. Causes of Cancer of Female Reproductive System can be included in Causes of Yoni-Vyapada as following-^[6]

Table 1: Hetus or causative factors of Cancer of Female Reproductive System

S N	<i>Mithyachar</i>		<i>Pradushta Artava</i>	<i>Bija-dosha</i>	<i>Daiva / God</i>
	<i>Mithya-Aahar</i>	<i>Mithya-Vihar</i>			
1.	Mal or inadequate diet	Poor local hygiene, Coitus in abnormal body posture	Artava refers to female sex hormones, ovum & menstrual blood.	Abnormalities of sperm or ovum	Unknown or Idiopathic factor
2.	Over eating	Use of foreign body for sexual orgasm	Here Artava refer to hormones.	Chromosomal abnormalities.	
3.	Over eating of non-congenial, un-hygienic and incompatible food	Human Papilloma Virus (HPV), Herpes simplex virus type 2 (HSV-2)	Ovarian hormones are causative factors for a good number of gynecological disorders including cancer.	Family history or genetic abnormalities	
4.	Corpus cancer syndrome-hypertension obesity& diabetes (Uterine cancer)	STD like syphilis, lymphogranuloma venereum, chlamidia infection, early age of first pregnancy (Cervical cancer)	Late menopause (beyond 52 yrs.) is associated with Uterine cancer	Genetic inheritance (Lynch-II syndrome), mutation of BRCA I & II genes (Ovarian and Breast cancer)	
5.	Use of coffee, tobacco, alcohol and dietary fat (Ovarian cancer)	Exposure to talc and asbestos (Ovarian cancer)	History of intrauterine exposure to (DES) diethylstilboesterol associated with Vaginal cancer.	Familial cancer syndrome (Lynch type I & II)	

Table 2: Gynecologic cancer symptoms

Symptoms	Cervical	Ovarian	Uterine	Vaginal	Vulvar
Abnormal vaginal bleeding / discharge	*	*	*	*	
Pelvic pain/ pressure	*	*	*		*
Abdominal pain / back pain		*			
Bloating		*			
Changes in bowel habits		*			
Itching & burning of vulva					*
Painful micturition	*				
Painful intercourse		*	*		
Nausea, indigestion		*			

Abnormal vaginal bleeding / discharge are the main symptom found in all Gynecologic cancer.

Differential Diagnosis for Gynecologic cancer-^[7]

Raktapradar, Raktaja Yonivyapad, Raktarbuda, Rajovruddhi, Pittaja Yonivyapad, Raktaja & Pittaja Rajodushti, Adhoga-Raktapitta, and Raktagulma these all conditions can be considered for Differential Diagnosis for Gynecologic cancer

- Raktapradar:** - It is irregular and excessive bleeding during menstrual or inter-menstrual period. In *Raktapradar*, causative Dosh is *Vata* and *Dushya* (dushta dhatu) is *Rakta*. *Rakta* aggravates *Pitta* also. On the basis of foul smelling, multicoloured discharges and incurability, this *Sannipataja Raktapradar* seems to be description of Uterine and Cervical carcinoma.
- Rakataja Arbuda:** - Derivation of word *Arbuda* by *Amarkosha* is that which grows very fast. According to its specific clinical features (covered with muscular sprouts and continuous bleeding etc.) as well as nature of incurability, the *Rakataja Arbuda* appears to be description of cancer.

3. **Rakta Gulma:** - It deals with the various new growth of female genital tract. The disordered Doshas after reaching *Kostha* (abdominal cavity) produces *Gulma*. The origin of growth is un-traceable. *Rakta gulma* peculiar to women arises from disordered Rakta i.e. *Artava*. The *vata prakop* along with other disordered doshas attacks the previously formed *sthan-vaigunya*. As more and more dosha get collected at the site, *gulma* increases in size. *Artav-rodha* means disturbed physiology of menstruation, resulting either into amenorrhea or menorrhagia. Digestive disturbances- nausea, vomiting, diaohrea, indigestion, loss of appetite, pain in abdomen. Ovarian carcinoma can be diagnosed as *Rakta gulma*.
4. **Rakta Yoni / Asruja yoni-vyapada:** - Due to excessive use of *Rakta* and *Pitta* aggravating factors, the *Rakta* situated in reproductive organs get vitiated by *Pitta* and then there is excessive bleeding per vagina.
5. **Artava dushti / Rajo dushti:** - These are menstrual disorders of 8 types- *Vataja*, *Pittaja*, *Kaphaja*, *Kunapgandhi*, *Granthibhuta*, *Putipuya*, *Kshina* and *Mutrapurish-gandhi*.
Kunapgandhi Artava dushti- (smell of a dead body) caused by *Rakta*, characterized by menorrhagia. It is found in necrosis of tissues occurring in carcinoma, which is incurable. It can be considered as early stage of endometrial carcinoma.
Granthibhuta Artava dushti- (clotted appearance) caused by *Kapha* and *Vata*. Here clotted appearance probably refers to thick mucoid or mucopurulent discharges associated with slough, often seen in malignant disorders of reproductive organ especially cervical carcinoma.
Putipuya Artava dushti- (putrid and purulent) caused by *Pitta* and *Kapha*. Infective condition of reproductive system like severe endometritis leading to pyometra. Pyometra is associated with endometrial carcinoma.
Mutrapurish-gandhi Artava dushti- Sometimes in advanced Cervical carcinoma (3rd or 4th stage), this type of smell of urine and feces in menstrual blood may be noticed.

Pre-cancerous conditions: - *Yoni-vyapada*, *Karnini yonivyapada*- cervical erosion, *Kaphaja arbuda*- fibroid, *Yoni arsha*- polyps, *granthis*.

Samprapti of cancer of female reproductive system

- **Doshas-** *Tridosha*, predominantly- *Pitta*, *Vata*.
- **Dushya-** *Rakta*, *Mamsa*.
- ***Sthan-vaigunya*** is produced in a female genital track by the following factors: multiple pregnancies, abortion or miscarriages, disease of genital tract, high fertility.
- **Strotodushti-** *Rasavaha*, *Raktavaha*, *Artavavaha*, *Mamsavaha*, *Medovaha*.

Treatment approach to Gynecologic cancer

Line of Treatment approach (along with standard conventional treatment) –

- Endometrial and Cervical carcinoma- treatment of *Raktapradara* and *Artava-dushti*.
- Ovarian carcinoma- treatment of *Rakta-gulma*.
- Breast carcinoma- treatment of *Arbuda*.
- ***Hetu Viparita*** treatment- treatment of vitiated *Rakta*, *Pitta* and *Vata*.
- ***Vyadhi Viparita*** treatment- treatment of *Raktapradara*, *Rakta-gulma*, *Adhoga Raktapitta*, *Yoni vyapada*, *Artava dushti*.
- Preparations can be used- *Pushanug chruna*, *Shatavari-ghruta*, *Kushmanda-khanda*, *Bol-parpati*, *Pradarantak-ras*, *Pradarari-loha*, *Jeerakadi-avaleha*, *Ashokarishta*, *Dhataki-pushpa*, *Darvyadi kvatha*.

Prevention of Cancer

Up to 85% of cancers can be prevented by avoiding environmental risk factors. Though age, race, gender and family history cannot be changed, knowing your personal cancer risk can help you devise a prevention strategy with regular screening and healthy lifestyle choices for creating balance of Doshas just by adding more fruits and vegetables to your diet or it can mean putting down your pack of cigarettes, tobacco and alcohol. Cancer occurs due to DNA damage and we think that this DNA damage may occurs due to *Apathya Ahar-Vihar* and not following *Dincharya*, *Ritucharya* prescribed by Ayurveda. To prevent the cancer, the only thing in our hand that to follow *Pathyakar Ahar-Vihar*, to make changes according to *Dincharya*, *Ritucharya* as possible.

Conclusion

Cancer is the deadliest disease mentioned in Modern medicine because till now it doesn't have any proper treatment and which is available is having lots of side effects hampering the quality of life. Therefore there is a need for integrative approach with Ayurveda to control the progression of the cancer and preventing the side effects of treatment.

Cancer is not mentioned in Ayurveda directly and there is no need to give a particular name to a disease, just see the signs and symptoms and think about *dushta dosha*, *dushya* and *srotas* and treat according to them. But the same kind of signs & symptoms are mentioned for the *arbuda*, *gulma*, & *granthi* which are also incurable like cancer and the treatment mentioned in Ayurveda for them can prevent from the progression of the cancer disease. And if this treatment can help to prevent the disease, means this can be help to cure the disease only need is to do proper research on it.

Cancer can be curable in future with the help of preventing the causative environmental factor & devising an integrative approach to cancer treatment by exploring the Ayurvedic principles

References

1. Sung H, Ferlay J, Siegel RL, Laversanne M, Soerjomataram I, Jemal A, Bray F. – Global Cancer Statistics 2020: GLOBOCAN Estimate of Incidence and Mortality Worldwide for 36 cancers in 185 Countries, *CA Cancer J Clin.* 2021 May;71(3):209-249. doi: 10.3322/caac.21660. Epub 2021 Feb 4.
2. Charaka Samhita - (Sutra-sthana 1/24) - 2016, Volume-I, Vd. Harish Chandra Singh Kushwaha, Chaukhamba Orientalia, Varanasi.
3. Charaka Samhita - (Sutra-sthana 18/44) - 2016, Volume-I, Vd. Harish Chandra Singh Kushwaha, Chaukhamba Orientalia, Varanasi.
4. Sushruta Samhita - (Nidana-sthana 11/13, 14, 20) - 2001, Volume-I, Anant Ram Sharma, Chaukhamba Surbharati Prakashan, Varanasi.
5. Charaka Samhita - (Vimana-sthana 5/14, 15, 16) - 2016, Volume-I, Vd. Harish Chandra Singh Kushwaha, Chaukhamba Orientalia, Varanasi.
6. Charaka Samhita - (Chikitsa-sthana 30/8) - 2012, Volume-II, Vd. Harish Chandra Singh Kushwaha, Chaukhamba Orientalia, Varanasi.
7. Striroga-Gynaecology - 2020, Dr. Hemalatha Kapoorchand, Chaukhamba Vishvabharati, Varanasi.