

ROLE OF AYURVEDA IN INTEGRATED CANCER REHABILITATION: AyurVAID's INTEGRATED CANCER REHABILITATION PROGRAM (ICRP) - A ROLE MODEL

Zankhana. M. Buch

M.D. (Kayachikitsa), Consultant Physician AyurVAID hospitals, Domlur, Bangalore,
Karnataka, India

ABSTRACT

Cancer diagnosis, including careful clinical and pathological assessments, is the first step to cancer management. Once a diagnosis is confirmed, it is necessary to determine the cancer stage, where the main goals are to aid in the choice of therapy, to determine prognosis, and to design treatment protocols. The primary modalities of cancer treatment are surgery, chemotherapy, and radiotherapy; these may be used alone or in combination. (*Globalcancer facts and figures 2nd edition*). The combined modality therapy has been responsible for improved survival rates in number of different forms of cancer. Treatment of cancer ranges from the use of powerful chemicals, bursts of radiation to complete removal of tumour and surrounding tissue. Each treatment type brings a certain level of risk, pain and disability to the patient, but malignant cells when left untreated inevitably choke off vital organs and circulation. In that consequence, Ayurveda can offer a lot of relief to patients through natural treatments. (*Zankhana Mankad et al*). WHO has stated certain primary objectives of treatment of cancer, which includes Integrative Oncology. There is increasing emphasis worldwide on the development of specialized cancer centres that apply evidence-based multimodal therapies and provide rehabilitation and palliative care. Complementary therapies are increasingly integrated into mainstream cancer programs and centres. According to Harvard Medical School researchers, almost 12% of children and adolescents in the United States use complementary or alternative medicines, known as CAM. About 66% of children with cancer use some type of CAM. At AyurVaid Hospital Domlur, Bangalore an integrated rehabilitation program for cancer patients is being carried out, the details are mentioned below.

Keywords: *Ayurveda, cancer rehabilitation, Rasayana, quality of life*

INTRODUCTION

Cancer diagnosis, including careful clinical and pathological assessments, is the first step to cancer management. Once a diagnosis is confirmed, it is necessary to determine the cancer stage, where the main goals are to aid in the choice of therapy, to determine prognosis, and to design treatment protocols. The primary modalities of cancer treatment are surgery, chemotherapy, and radiotherapy; these may be used alone or in combination¹. The combined

modality therapy has been responsible for improved survival rates in number of different forms of cancer.

Treatment of cancer ranges from the use of powerful chemicals, bursts of radiation to complete removal of tumour and surrounding tissue. Each treatment type brings a certain level of risk, pain and disability to the patient, but malignant cells when left untreated inevitably choke off vital organs and circulation. In that consequence, Ayurveda can offer a lot of

relief to patients through natural treatments². Today, more than ever before, millions of people are seeking an approach to medicine and health care that is more comprehensive, more holistic and integrative, and more compassionate and sensitive to their needs as a whole person. This is particularly true for those dealing with cancer.

IMPACT OF CANCER

The negative impact of cancer on the lives of patients was assessed in terms of health related quality of life (HRQoL). The aspects most likely to be affected were those with a physical component, and general health perceptions. These results can thus help quantify the impact of a new cancer on HRQoL evolution and potentially facilitate early intervention by identifying the most affected HRQoL domains³.

PRINCIPLES OF CANCER REHABILITATION

Medical advances in the diagnosis and management of cancer have markedly increased survival rates. While the treatment for some patients may now result in complete cure and no perceived physical deficits, for others, an aggressive definitive treatment may result in significant physical impairment or disability. To ensure quick restoration of optimal function, early and continued aggressive rehabilitation interventions should be provided, including physical and occupational therapy, prosthetic and orthotic devices, and assistive equipment. Application of rehabilitation techniques frequently results in a swift functional improvement and a reduction of subjective complaints, even when the prognosis for life is considered poor. It has always been difficult to predict with a degree of certainty the life ex-

pectancy of an individual with cancer. Modern diagnostic techniques and effective treatment of malignant neoplastic diseases have invalidated old statistics and dogmas regarding life expectancy and thus made accurate prognostication even more difficult for the clinician. No cancer patient, even one with widespread metastases, should be denied the benefits of aggressive treatment, including appropriate surgical intervention, chemotherapy, radiation, and comprehensive rehabilitation. These interventions, when offered in an integrated and timely fashion, prolong life, protect organs and residual healthy tissue, reduce pain, and maximize self-care and mobility skills, and thereby help to reduce the stigma of cancer and physical impairment while providing dignity and a better quality of life for the cancer patient⁴.

NEED FOR INTEGRATION

Recent Research indicates a definite positive impact on treatment outcomes when an integrative approach that focusses on symptom control and quality of life is provided along with the standard therapeutic regimens. However, implementation or training of this approach is not seen widely due to the culture of medical training and practice.⁵

Researchers at MD Anderson Cancer, - University of Texas, reported that Curcumin could stop the spread of multiple myeloma, head and neck cancer, lymphoma, lung cancer, melanoma, pancreatic cancer, prostate cancer, breast cancer and others by triggering apoptosis (programmed cell death).⁶

Vaidya et al. have written an excellent review on complementary and alternative medicine for cancer care in India: basic and clinical perspectives. It describes the

anticancer properties of several ayurveda plants namely *Withaniasomnifera* (L) Dunal, Syn., *Tinosporacordifolia* (Willd.) Miers, *Semecarpusanacardium* Linn and *C. curcuma longa* Linn.⁷

A survey conducted by ESMO(European Society of Medical oncologist) brought forth an interesting observation that the practitioners in private practice or teaching hospitals had substantially more positive attitudes than those in comprehensive care centres.⁸

AYURVEDA AS AN INTEGRATED CARE FOR CANCER

A Clinical study of the role of Rasayana as a pre-, adjuvant- and post post-treatment of chemotherapy in management of carcinoma was carried out in 50 patients of carcinoma receiving chemotherapy, Rasayana Avaleha containing several drugs like such as amalaki, guduchi as well as haridra as a prakshepdravya was administered in a dose of 10 gm bd for 3months. The effect of therapy was significant in on mouth ulcers, constipation, and myelosuppression and in on improving general well well-being of the patient⁹ Effect of Rasayana Avaleha on adverse effects of chemotherapy:

- 46.01% relief was found in the complaints of nausea and vomiting
- 42.32% relief was found in constipation
- 42.02% relief was found in mucositis
- 19.5% relief was found in maintaining the WBC count.

Effect of chemotherapy on patients who were not administered Rasayana Avaleha:

- Nausea and vomiting worsened by 74%
- Constipation worsened by 67.32%
- Alopecia worsened by 19.66%
- Hb fall was by 8.18%
- WBC fall was up to 79.25%

AyurVAID's ICRP- AN ARCHYTYPE

AyurVAID Hospitals is a pioneer and leader in rigorous, documentationand process driven, classical Ayurveda medical care. AyurVAID,Domlur, Bangalore is India's 1st NABH (National Accreditation Boardfor Hospitals & Healthcare Providers) accredited Ayurveda hospitals.AyurVAID is also the proud winner of the QCI-DL Shah National Quality-Award, 2012- another unique testimonial to quality of medical careprovided by AyurVAID.¹⁰

AyurVaid's Integrated Cancer Rehabilitation Program (ICRP) is built on a foundation of classical Ayurveda management that addresses primary as well as secondary(metastatic) cancers.The integrated and holistic approach adopted under the ICRP results in an individualised program that includes customised diet-lifestyle medicine-treatments prescription.

PANCHKARMA -ITS SIGNIFICANCE IN CANCER

Incompatibility in food and lifestyle causes vitiation of *doshas*(toxins) in the body, which ultimately lead to disease formation. Disease cannot be treated by Shaman chikitsa alone if the vitiation of doshas is excessive.The vitiated *doshas* (toxins) then have to be eliminated from the body either through the natural passages of the body.The process involved in such elimination of toxins is known as *Panchkarma* or *Shodhan Chikitsa*.¹¹ There is excessive vitiation of dosha in cancer patients. *Shaman* alone may not help in pravarabala (strong)patients. Pre Procedures are important in strengthening the bala of the patients,especially the *avara*(low) and *madhyam* (medium)*balap*patients.Pre Procedures with medicated oil therapies like *Shirodhara*,*abhyangam* are relaxing and rejuvenating and also they build the

strength of the patients. *Panchakarma* therapies help in counteracting the side effects of chemotherapy and radiotherapy. *Panchakarma* procedures also help in minimizing the future risk of cancer by purifying the system. Season wise *Panchakarma* therapies should be carried out in healthy individuals to prevent cancer. Individuals with the family history of cancer should undergo *Panchakarma* therapies for the preventive aspect. Since the chemotherapy and radiotherapy drugs cause vitiation of doshas in the body mainly the *pitta dosha*, *sadhyasnehan* prior to chemotherapy schedule has got paramount significance.¹² External therapies like *Abhyangam*, *BaspaSwedana*, *shirodhara*, *pshastishaliswedana* etc help in maintaining the energy levels. Normal cells and tissues of the body are rejuvenated and have better tolerance to the side effects of the chemotherapy and radiotherapy. Sesame oil, which is used in *Panchakarma*, for massage and enemas has also been shown to have antineoplastic properties. Lipase-digested sesame oil and undigested sesame oil dramatically inhibited the growth of three malignant colon cell lines in vitro but did not substantially inhibit growth of normal colon epithelial cells. Sesame oil also selectively inhibited malignant melanoma cell line growth in vitro, as compared to normal melanocytes). After completing *panchakarma*, cancer patients report having greater energy, clarity of mind, and a sense of well-being. They also report relief of symptoms and significant improvement in health status.¹³

CASE STUDIES¹⁴

OVERALL IMPROVEMENT OF HEALTH STATUS POST RADIOTHERAPY AND CHEMOTHERAPY

- A male 64 years diagnosed as Non-Small Cell Carcinoma with brain metastasis visited AyurVaid Hospitals for ICRP (INTEGRATED CANCER REHABILITATION PROGRAM). He underwent radiotherapy for the resolution of brain metastasis and responded well to the treatment. Post Radiotherapy he underwent chemotherapy at Cancer Hospital for the primary lung tumor and mediastinal lymph nodes.
- He visited AyurVaid Hospital during his chemotherapy sessions and classical Ayurveda medicines were selected based on his constitution to improve his overall health status, to reduce the side effects and to target the tumor as well.
- He could complete his chemotherapy without serious side effects, although he had some minor complaints like mouth coating, skin discoloration, frequency of stools, and abdominal pain after he completed chemotherapy, for which he underwent IP treatments at AyurVaid and had significant improvement in above complaints along with marked improvement in his performance status scale (Before Treatment 70, After Treatment 90).
- Also his natural killer cell and Immunoglobulin evaluation was done post Ayurveda treatments and was found to be absolutely normal, which in such cases is usually very low.
- Though conventional therapies are the main line therapies in Cancer management, his tumor did not respond to the chemotherapy and now has been advised for oral chemotherapy for next three months.
- He has been now advised to continue oral Ayurveda medicines for overall

health improvement and for a follow up scan to review the response of Ayurveda drugs to the tumour activity.

ENDOMETRIAL HYPERPLASIA-ELIMINATING A SIGNIFICANT RISK FACTOR FOR ENDOMETRIAL CARCINOMA THROUGH AYURVEDA

- A female 43 years, of Vata Pitta constitution and Madhyam koshtha, known case of Hypothyroidism, visited AyurVAID Hospitals for the following complaints:
 - Irregular periods since 1 month
 - Mood changes since 1 year
 - Anxiety
 - Disturbed sleep since 1 year
 - Occasional Constipation
- She was on allopathy drugs for the above complaints. Her gynaecologist suggested in the month of April 2012, an ultrasound, which suggested Endometrial Hyperplasia, with a thickening of 17.6mm.
- With this finding, she was advised by her gynaecologist to undergo a biopsy for the endometrium to rule out endometrial malignancy. The patient was not willing for an intervention, So she turned towards Ayurveda and visited AyurVAID in the same month.
- She was prescribed internal medicines and kriya (Shirodhara) for 7 days to correct Apana Vayu and stimulate Reproductive system, and ease her from the anxiety.
- She got her period immediately on the 3rd day of the treatment, and was asked to continue treatment for 1 month with regular reviews and a repeat ultrasound after 1 month.
- She could also discontinue her psychiatric drugs, as she could now sleep better after the 7 counts of Shi-

rodhara treatment, and has been able to sustain good sleep without the help of sleeping pills.

- Her Ultrasound as on 12/6/12 shows normal endometrial thickening with 7.5mm (5-10mm is the normal range in menopausal age group). Though her periods are yet to start in the following cycle, she is advised to continue the medicines for 3 months. Also, she has been advised for yearly screening initially for status of her endometrial hyperplasia. Her overall health has also improved with better sleep and better mental tolerance
 - It is really satisfying to know that classical Ayurveda worked well in eliminating this emerging risk factor for endometrial carcinoma.
-

CONCLUSION

For improved access to appropriate care there is a need for incorporating principles and concept of integrative and palliative care with in the health care institutions and comprehensive care programs. Ayurveda offers excellent medicines and treatments which can be easily incorporated with the mainstream cancer medicines. Despite considerable recent advances in securing remission and possible cure, cancer has remained a disease equated with hopelessness, pain, fear, and death.

Its diagnosis and particularly the treatment is much painful than the actual symptoms of the disease. Patients have common fears, which have been called the six D's, Discomfort, Dependency, Disfigurement, Disability, Disruption of relationships, and Death. Over the past several decades, cancer treatment includes multimodal treatment regimens (surgery, chemotherapy, and radiation) and palliative therapy administered by various

routes and innovative procedures have added to a large number of cancer survivors. However, the quality of life of these survivors during and even after the treatment period is pitiable. At this juncture, following the concept of Integrative oncology Ayurveda drugs by virtue of its anti-cancer potential, anti -oxidant potential etc. It can offer a lot of aid in improving and augmenting the quality of life of cancer patients¹⁵

REFERENCES

1. *Global cancer facts and figures 2nd edition*
 2. Mankad Z., Mankad D, and Shukla V.D. *Combating the toxicities of chemotherapy with rasayana : A step forward integrated oncology.* Ayu – 2007; Vol. 27: 3-
 3. *Impact of cancer occurrence on health-related quality of life: A longitudinal pre-post assessment*Stéphanie Boini^{1,2}, Serge Briançon Francis Guillemin, Pilar Galan and Serge Hercberg
 4. Kristjan T Ragnarsson, MD and David C Thomas, MD, Chapter 71*Principles of Cancer Rehabilitation Medicine, Cancer Medicine, Holland-Frei Cancer Medicine. 5th edition.*Bast RC Jr, Kufe DW, Pollock RE, et al., editors.Hamilton (ON): BC Decker; 2000.
 5. *Incorporating Person centred care principles into an on-going comprehensive cancer management program:*
 6. *A experiential account* VallathNandini, Sridhar CN, et al www.jpalliativecare.com April 16 2012,IP:115:184:35:103
 7. Aggarwal BB, Kumar A, Bharti AC.: *Anticancer potential of curcumin: Preclinical and clinical studies.* *Anticancer Res*, 2003; , 23: 363–3981.
 8. Vaidya et al *Review on complementary and alternative medicine for cancer care in India.: Basic and clinical perspectives* For Springer link 2008
 9. *Incorporating Person centred care principles into an on-going comprehensive cancer management program: A experiential account*VallathNandini, Sridhar CN, et al www.jpalliativecare.com April 16 2012,IP:115:184:35:103
 10. www.ayurvaid.com.
 11. Mankad Z., Mankad D, and Shukla V.D. *Combating the toxicities of chemotherapy with Rasayana : A step forward integrated oncology.* Ayu – 2007; Vol. 27: 3-
 12. www.ayurvaid.com
 13. www.ayurved-wagholi.org
 14. *Efficacy of Rasayana Avaleha as adjuvant to radiotherapy and chemotherapy in reducing adverse effects* Purvi Vyas, A. B. Thakar, M. S. Baghel, ArvindSisodia, and YogeshDeole
 15. *Encyclopedia of alternative medicines*
 16. *Interventional role of Haridra (Curcuma longa Linn) in cancer* Zankhana M Buch, Jayashree Joshi, Ashok Amonkar, Ashok B Vaidya *Clinical Cancer Investigation Journal*, Year 2012, Volume 1, Issue 2 [p. 45-50]DOI: 10.4103/2278-0513.99556
-

ACKNOWLEDGEMENT TO:

Mr Rajiv Vasudevan, CEO AyurVAID Hospitals, to provide the required support

CORRESPONDING AUTHOR

Dr Zankhana. M. Buch, MD

Consultant Physician AyurVAID Hospital Bangalore, KARNATAKA, India
Email: zankhana_buch@ayurvaid.com
