Effectiveness of Integrated Approach on Cancer Care: A Case Study
Pramod Bhatta

ABSTRACT
Recurrence and metastasis is a great problem not only to the patient suffering from cancer but also to the doctors to care for the patient effectively. The present case study is a cancer case of a female, initially diagnosed with colon cancer in the year 1995 AD who underwent postsurgical and ayurvedic treatment simultaneously. The patient suffered from cancer in the different sites over the entire span of follow up duration of 24 years. Despite cancer growth since the initial diagnosis the patient suffered from uterine, renal cancers periodically and was successfully managed with the combined modern and ayurvedic approach. The patient enjoyed the quality and happy life with not much difficulty during the entire study period since the beginning of this case. The tools applied for the case study were observation, clinical examination, face to face interviews, laboratory investigation reports, phone contact, and family feedback.

The outcome of the study was highly remarkable and enthusiastic and revealed the outcome of ayurvedic and other holistic approaches that helped to promote the quality of life of cancer patients when combined with modern cancer care protocol. The study recommends conducting such research to analyses the effect of the integration of the ayurvedic treatment approach which will eventually help to effective cancer care in low-income countries such as Nepal.

Keywords: Ayurveda, Cancer care, Case study, effectiveness, Integrated approach.
INTRODUCTION

Introduction: Cancer is one of the most deadly challenges spreading drastically in the 21st century. Despite scientists’ best efforts to fight this disease, the sure-shot cure is still not available. Important aspects of the increasing trend of cancer may be due to increasing human life expectancy. According to the World Health Organization (WHO) report cancer caused 9.6 million deaths in 2018 and 70% of them were in low and middle-income countries. Colorectal cancer ranked third most common cancers. The associated cancer risk factors are tobacco, alcohol, unhealthy diet, and physical inactivity. Cancer can be prevented by avoiding risk factors, early detection, and proper management.

A correct cancer diagnosis leads to the choice of treatment modalities such as surgery, radiotherapy, and chemotherapy. The primary goal is generally to cure cancer or considerably prolong improved quality life through curative, supportive or palliative care and psychosocial support. The patient usually visits at late-stage due to inaccessible diagnosis and treatment facilities mostly in low-income countries making treatment difficulties. American Cancer Institute described following different modern cancer treatment methods:

1. Surgery is taking out cancer growth fully or partially removing cancer growth.
2. Radiation Therapy Radiation therapy is a method of killing cancer cells with radioactive radiation.
3. Chemotherapy: in this cancer cells are killed with the administration of chemical drugs.
4. Immunotherapy care of cancer patients with an enhanced immune system.
5. Targeted Therapy in this therapy targeted cancer cells to alter the growth, division and spreading.
6. Hormone Therapy mostly in the case of breast and prostate this kind of therapy retards or reluctant use of hormone that cancer cells use to grow.
7. Stem Cell Transplant restores blood-forming stem cells that had destroyed by Chemotherapy or radiation.
8. Precision Medicine Precision medicine enables doctors to make treatment choices based on a genetic understanding of cancer patients.

MATERIALS AND METHODS

Methods Even with all the above treatment methods still, cancer treatment seems incomplete. At present scenario of cancer burden, the Ayurvedic system of medicine seems supportive in better treatment in conjunction with the modern medical system. It is also evident by the view of Poornima and Thomas history of Ayurveda and indigenous medicine is well described and practiced as mentioned in ancient Vedas and other scriptures.

The principle of Ayurveda is based on the equilibrium of tridoshas (Vata, Pitta and Kapha) and this can be obtained from herbs and herbal-mineral in the indigenous medicine system which is known from very early times for preventing and curing different tumors. It made scientists to focus researches on complementary and alternative medicine for the management of cancer. ‘Charaka’ and ‘Sushruta Samhititas’ the Ayurvedic textbooks mentioned cancer as ‘Graṭhi’ or ‘Arbuda’. In malignancy, the tumors caused by altered function of all doshas (Tridoshas) and losing mutual coordination causing tissue damage and resulting in proliferation. Herbal preparations are the basis of aforesaid ayurvedic therapy. Scientifically these preparations work on different biochemical channels to nourish the body ultimately supporting bodily defense systems.

Presently ayurvedic, herbal preparations are under clinical studies to evaluate their efficacy for anticancer properties herbs that contain many active ingredients producing therapeutic benefits. It also helps in reducing the risks of adverse effects and minimize supplements requirement in cancer cachexia. In this connection, the main objectives of this study were to explore the effectiveness of the ayurvedic integrated approach on cancer care which is measured in terms of treatment outcome and patient satisfaction, relief from pain, and quality of life.

Case History of Patient

The present case was of a 72 years old normotensive,
nondiabetic female patient, with a history of chronic smoking initially diagnosed to have colon cancer at Patan Hospital and underwent surgical management, visited the Ayurvedic Center in 1995 AD. After receiving surgical and other needful management from the hospital, she visited the Ayurvedic clinic for further treatment. The patient was an old smoker with lean body stature and cooperative, accompanied by her family members. The patient’s health condition was evaluated through the Ayurvedic approach along with other hospital details and diagnoses. Her general condition was ill-looking, pallor and lethargic. She was treated with ayurvedic medicine and doses based on ayurvedic texts. Hirak bhasma, yogendra rasa, shilajatu, bilwadi kwath. She was continually followed up. The progress was very encouraging, she received the treatment for approximately five years from 1995. For the first two years, she received all medicines. Then she took only two medicines Yogendra Rasa and Shilajatu for one year. She continued one medicine Arbudhar Yog for two more years. After the full course of treatment, she underwent clinical and laboratory examination that was found normal. She had a normal life without any complication for 9 years of initial treatment. Later in 2004 AD, she had a gynecological problem and went to the hospital where it was diagnosed to have uterine cancer that was surgically excised and underwent radiotherapy at Bir Hospital for one month. She also received ayurvedic medicine from the same ayurvedic center after completing her hospital treatment (surgery and radiation) for uterine cancer. She was treated further with the yogendra rasa, shilajatu. She improved very well with the medicines and had no other major complaints for the next eight years. The patient was well before two months of diagnosis. After 20 years of diagnosis of colon cancer and 10 years of uterine cancer, in the year 2015AD, the patient revisited the hospital with blood in urine, mild weakness and slight difficulty while urinating. After clinical and laboratory investigations, ultrasonography and CT scan showed renal carcinoma, which was managed surgically with right radical nephrectomy without major complication. Histopathological report showed multifocal invasive high-grade urothelial carcinoma. After hospital management with surgery, the patient re-visited to the same Ayurvedic Center and received shilajit, yogendra rasa, kanchnaar guggul for 2 years. After the treatment course, she had a normal appetite, enjoyed a happy family and social life until the rest of the study period. The medicines during the treatment period were given to relieve symptoms arose during the course of treatment along with other Ayurvedic medicines. She was markedly well and enjoying her family and social life. She continued periodic visits to the ayurvedic center. Apart from that she was closely monitored through phone calls and provided needful advice. Her physical condition, clinical findings and laboratory tests such as blood counts, urine tests, USG, were unremarkable until the initial month of the year 2019 AD.

**Adopted treatment**

The patient adopted both modern and ayurvedic treatment simultaneously. The patient received allopathic treatment from different hospitals in Kathmandu valley. She underwent surgery and Radio Therapy and received treatment from ayurvedic center.

**Outcomes after treatment**

The patient was quite well and took care of her grandchildren and was able to carry out all her personal, familial and social activities normally. Periodically she had to take some ayurvedic medicine to improve her health condition. She received supplementation along with some vitamins. She followed advice to take light, less fatty and spicy food which helped to improve her health sustainably.
Finding from observations of researcher/doctor

Patients had a postsurgical problem that gradually subsided. She was found in apparently well in each visit. The patient was cooperative and accompanied by family members. The patient always preferred and asked her family members to visit the ayurvedic clinic whenever she had any problem.

The positive findings with the patient were as follows:

- The patient always followed the advice of the doctor.
- The unique observation was she had almost constant weight during the entire study period
- Taking care of children and family members kept her busy
- She never smoked after diagnosis of her disease
- The patient developed faith and self-confidence against the disease after receiving ayurvedic treatment
- The supportive ayurvedic treatment along with modern treatment provided better ground for promoting and maintaining her better health.

The patient enjoyed quality life for the entire study period approximately 24 years.

Other important components observed were family support, health personnel's high motivation to support morally in improving the quality of life of the patient. According to Sharpe et al. in their study mentioned that cause of poor quality life were major depression as a leading cause of disability and comorbid condition with a chronic disease is associated with reduced quality of life and increased health-care costs. After taking a month course of ayurvedic medicines, the patient felt very well and later gradual improvement was observed. She was able to perform all her activities, she was able to attend familial and social programs frequently.

Discussion

The patient’s survival with good quality and span of life is encouraging as an integrative treatment approach. According to Vogt et al., cancer survival after multiple organ involvement found poor if untreated. In this case, the patient had developed cancer 24 years back and was in good health for the entire study period. In general findings of the study showed a 5-year survival rate of people with localized stage colorectal cancer is 90%. If cancer has spread to distant parts of the body, the 5-year survival rate falls to 14%. Even after for patients who have just 1 or a few tumors that have spread from the colon or rectum to the lung or liver, surgical removal of these tumors can eliminate cancer, which improves the 5-year survival. Vogt et al. also mentioned in the article that long-term outcome from cancer depends upon cancer type, stage, genetic factors, behavioral influences, lifestyle, and comorbidities.

The study also supports the concept of integration of ayurvedic medicine along with modern medicine provides better health care. K Haire et al showed the evidence suggestive of improved health outcomes with better-integrated delivery and also help to reduce the cost of healthcare.

The ayurvedic medicine helped patient health improvement and supported acquiring better health. Emphasizing combining the modern western and traditional medicines such as holistic Ayurveda which would be of great advantage to manage symptoms, control side-effects and improve the state of mental wellbeing. The fact was also supported by the view of Jain et al. where they suggested the importance of an integrated approach of ayurvedic therapies for the management of cancer. This integrated approach would make the cancer patients live and not just to exist which is evident from the statement of
WHO that ‘Relief from physical, psychosocial, and spiritual problems can be achieved in over 90% of advanced cancer patients through palliative care.\textsuperscript{20}

**Conclusion**

The study showed improved health and quality of life of the patient when ayurvedic treatment was administered along with the integration of modern medicine. The findings suggest the need for further scientific research in ayurvedic treatment to improve effective patient care. Besides, the case also emphasizes the need for further research to explore the causative risk factors of cancer and also metastasis disease based on ancient and modern methods. The other important components ineffective and better cancer care and treatment of patients include ayurvedic medicine, cancer patient’s positive attitude, caretaker role and role of treating doctor.

**Acknowledgment**

The author(s) would like to acknowledge Dr. Kapil Amgain, Dr. Binod Bhatta and Dr. Tej Bahadur Karki for their valuable feedback during the preparation of the manuscript.

**REFERENCES**