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MANAGEMENT OF MENOPAUSAL COMPLAINTS, MILD HYPERTENSION, ACIDITY, LOW IMMUNITY, BORDERLINE CHOLESTEROL AND OBESITY USING THE 'INTEGRATED APPROACH' IN A PATIENT WITH HISTORY OF OVARIAN CANCER

ANJALI MUKERJEE

Nutritionist, Researcher, Columnist, Author,
Founder Director, Health Total Pvt. Ltd.

ABSTRACT

A 43-year-old female was diagnosed with ovarian cancer in the year 2000, following which a hysterectomy was performed in the year 2010. After the surgery, the patient received six cycles of conventional chemotherapy treatment in 2010. She presented at the Health Total centre in January 2017. Her height was 5' 1" and weight 72.8 kg, yielding a body mass index (BMI) of 30.3 kg/m^2, which reflected obesity. She also suffered from menopausal complaints, mild hypertension, depression, acidity, stress, low immunity, along with borderline cholesterol.

This case study illustrates the benefits of the 'Integrated Approach' in the management of obesity, hypercholesterolemia, along with improvement in immunity, energy, acidity, depression and reduction in menopausal complaints. The Integrated Approach included patient-specific nutritional therapy, ayurvedic herb support, vitamin and dietary supplements, stress management and regular exercise. A healthy diet and lifestyle modifications play a significant role in weight loss in obese individuals, more specifically in individuals with a history of carcinomas. During the 25-week treatment period, the patient achieved significant weight loss with subsequent improvement in acidity along with reduced stress levels, increased immunity, thus showing significant improvement in the quality of life of the patient.

Keywords: Obesity, Immunity, Menopausal complaints, Integrated Approach, Nutrition, Ayurveda

INTRODUCTION

Based on worldwide statistics, ovarian cancer is the seventh most commonly occurring cancer in women for both incidence and mortality resulting in 6.3 and 3.8 cases per one lakh women, respectively [1]. A meta-analysis

study reported a 16% and 30% increased risk of ovarian cancer in overweight and obese adult women respectively, when compared with normal weight individuals (18.5–24.9 kg/m^2) [2].

Certain cancer treatments can weaken the immune system, leaving the patient more vulnerable to infection. This is because cancer treatment can cause a drop in the number of white blood cells produced in the bone marrow [3]. Chemotherapy has the greatest impact on immunity, but surgery and some forms of radiation therapy can affect the immune system too.

In the present case, the patient came to us with low immunity, after undergoing hysterectomy in the year 2010, followed by six cycles of conventional chemotherapy treatment in 2010.

Ovarian cancer treatments such as chemotherapy, hormone replacement therapy (HRT), hysterectomy or oophorectomy (removal of ovaries), can cause severe menopausal symptoms, during and soon after treatment. The symptoms are often more intense than when menopause occurs naturally. These can have a negative effect on everyday life, such as not sleeping well due to hot flushes and night sweats [4].

This case was particularly challenging as the patient's immunity had to be improved and reduction in body weight following a hysterectomy (a time when weight reduction becomes increasingly challenging) had to be brought about. Also, losing weight is generally associated with 'weakness, reduced strength, reduced immunity.' Chemotherapy, oophorectomy and hysterectomy all bring about a reduction in metabolism and immunity. So, special care had to be taken to help increase the patient's energy and immunity levels, manage her menopausal complaints and ensure compliance with the Health Total protocol, which needed to be designed to fit into her busy lifestyle, considering she was a doctor.

The Health Total 'Integrated Approach' was well-suited to help the patient, as this approach not only utilises nutritional therapy along with moderate exercise and lifestyle modifications in order to effect weight loss, but because this approach was also designed to correct all her concurrent medical complains in order to bring about overall improvement in her health status.

CASE REPORT

A 43-year-old patient, who was by profession a qualified MD doctor at a reputed hospital in Mumbai, India, presented with borderline cholesterol, depression, menopausal symptoms such as hot flushes and palpitations. She was diagnosed with ovarian cancer in the year 2000. The attending gynaecologist performed a hysterectomy, a bilateral salpingo oophorectomy and removed all evidence of the disease. After the surgery, the patient received six cycles of conventional chemotherapy treatment and was later put on oestrogen therapy, which she is still continuing till the date of this case study.

The patient also suffered from acidity (for which she was taking pantoprazole), along with high levels of stress. Post chemotherapy, she complained of low immunity levels, due to which she complained of recurrent colds. She had good appetite and sound sleep. She had no known allergies, did not smoke or drink. She had a family history of hypertension and diabetes mellitus on the maternal side of her family. She exercised regularly for an hour early in the morning.

She had moderately elevated blood pressure (140/90 mmHg). She presented at the Health Total centre with borderline high cholesterol

that was detected in December 2016, but she did not want to start allopathic treatment for it and was seeking natural treatment options.

At the time, her weight was 72.8 kg, height 5' 1" and a BMI of 30.3 kg/m , which falls in the obese category. She wanted to reduce her weight to match what it was when she was 25 years of age, i.e., 57 kg.

She was taking a combination of Vitamin B12, B3 and B9, ascorbic acid and sodium ascrobate, and vitamin D3 on her own to supplement her nutritional requirements.

Diet recall

The patient's diet recall comprised two chapatis with ghee, two fruits and one cup of tea for breakfast, followed by a mid-morning tea. For lunch she would have two chapatis with rice, vegetables and dal, followed by tea and fruits in the evening. For dinner, she would have two chapatis with vegetables. She would eat sweets once a week and would eat out once in a month but would rarely have fried food.

Treatment and Follow-up

The patient's first visit at the Health Total centre was in January 2017, during which she was advised to start a low glycemic index (GI), high fibre, complex carbohydrate diet and moderate protein with each meal. She was also asked to continue her one-hour morning exercise regime. Along with nutritional therapy, she was advised to take Ayurvedic herbs, seaweed, multi-vitamin supplements, calcium and folate supplements, natural antioxidants and probiotics.

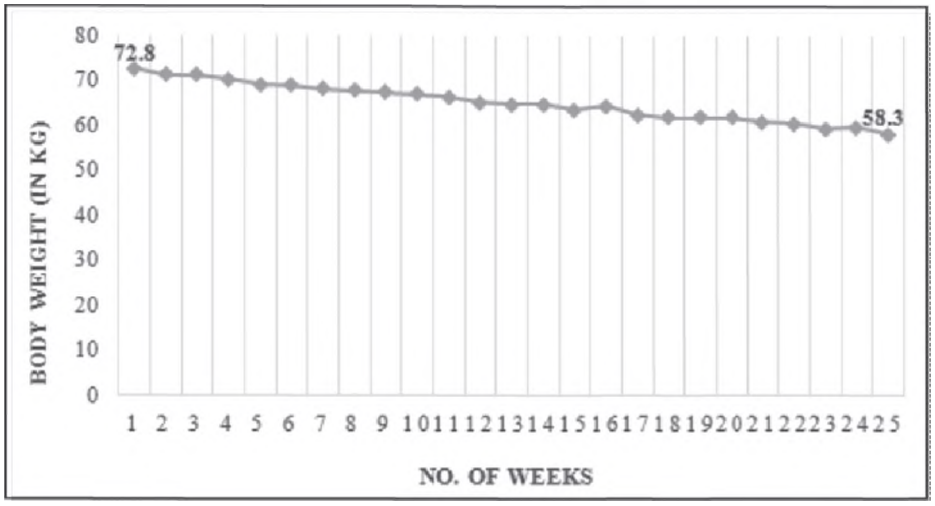
DISCUSSION

The objective of the Health Total programme was to help the patient resolve acidity, increase her immunity, reduce menopausal complaints, blood pressure, cholesterol and lower her stress levels, as well as help reduce body weight.

For the above-mentioned objectives, we used Ayurvedic herbs like *Garcinia cambogia*, that was used for managing obesity [5]. Punarnava ghanvati *(Boerhavia diffusa)* was given as a kidney cleanser [6] and *Phyllanthus niruri* as a deep level liver detoxifier [7]. Green Tea [8] and amla *(Emblica officinalis)* [9] were given as immunity boosters; and natural iodine in the form of seaweed as a metabolic booster [10]. Another traditional Ayurvedic formula containing Hartitaki *(Terminalia chebula)* [11], Shunthi *(Zingiber officinale)* [12] and Pippali *(Piper longum)*, was also given to improve her digestive function and alleviate acidity. The patient was also given vitamins and dietary supplements that included vitamins such as B, D, calcium and folate supplements, probiotics and antioxidants, both in natural and supplemental forms to boost her energy levels, improve immunity and to provide relief from stress.

During each visit, with the patients food plan was modified in accordance with her progress. The patient was non-compliant with the prescribed diet on a few occasions while being on the programme and ate out at restaurants having a variety of foods including prawns, puran poli, chicken noodles, cake and sweets. In spite of such occasional non-compliance, she still managed to lose weight with the use of herbs, vitamins and diet regimen given to her. At the 4-week follow-up, the patient had lost 2.4 kg by following the exercise and dietary changes. Six weeks later, she had lost additional 3.9 kg. 15 weeks later, the patient reported an additional weight loss of 8.2 kg by being compliant with the prescribed diet, exercise, and herbs. In all, her weight came down to 58.3 kg from the initial 72.8 kg over a period of 25 weeks (Fig. 1).

Fig. 1: Effect of the 'Integrated Approach' in the management of Body Weight



Effective weight management involves a careful balance of nutrient intake, physical activity [13], behaviour modification and a positive attitude towards achieving appropriate body weight. The overall aim of the programme was to focus on achieving good health. Eating and exercise habits that support a healthy lifestyle, often help individuals achieve ideal body weight. Regular physical activity is an essential component of any weight management programme and complements dietary protocols.

The purpose of this case report was to look at the efficacy of the 'Integrated Approach' in boosting immunity, reducing menopausal complaints, controlling hypertension along with scientific weight management. The patient was able to reach her desired target weight that she was at when she was 25 years of age. She stopped suffering from cough and cold that indicated improved immunity levels. She also experienced relief from menopausal symptoms, such as hot flushes and palpitations. Her cholesterol levels reduced and the Integrated Approach helped improve her overall health and lose significant weight.

CONCLUSION

The patient with BMI of 30.3 kg/m^2 was able to lose 14.5 kg, which was approximately 20% of her initial body weight with Health Total's Integrated Approach, over a period of 6 months. The case also highlights the many health benefits that the Integrated Approach helps achieve in addition to weight loss, such as improved immunity, reduction in stress levels, as well as reduced menopausal complaints. She also showed improvement in her energy levels by the end of the programme. This case study data illustrates that improved food choices, changes in lifestyle and moderate physical activity, along with Ayurveda and nutritional supplementation, play an important role in improving immunity, managing obesity and other comorbidities, thereby improving the overall sense of well-being in an individual.

REFERENCES

1. Ferlay J, Shin HR, Bray F, Forman D, Mathers C, Parkin DM. GLOBOCAN 2008, Cancer Incidence and Mortality Worldwide: IARC Cancer Base No. 10 [Internet]. Lyon, France: International Agency for Research on Cancer; 2010. Available from: http://globocan.iarc.fr
2. Olsen CM, Green AC, Whiteman DC, et al. Obesity and the risk of epithelial ovarian cancer: a systematic review and meta-analysis. Eur J Cancer. 2007. 43(4):690–709.
3. Kang DH, Weaver MT, Park NJ, Smith B, McArdle T, Carpenter J. Significant Impairment in Immune Recovery Following Cancer Treatment. *Nurs Res.* 2009. 58(2): 105–114.
4. Saeaib N, Peeyananjarassri K, Liabsuetrakul T, Buhachat R, Myriokefalitaki E. Hormone replacement therapy after surgery for epithelial ovarian cancer. Cochrane Database of Systematic Reviews. 2017, Issue 2. Art. No.: CD012559. DOI: 10.1002/14651858.CD012559.
5. Gogoi A, Gogoi N, Neog B. Dubious Anti-obesity agent HCA from *Garcinia*: A systematic review. Int J Pharm Pharm Sci. 2015. 7(7):1-8
6. Padavi DM, Rathod A, Chavhan S. Single Drug Treatment for Chronic Kidney Disease-A Case Study. International Journal of Advanced Ayurveda, Yoga, Unani, Siddha and Homeopathy. 2014. 3(1): 213-218.
7. Bhattacharjee R, Sil PC. Protein isolate from the herb, *Phyllanthus niruri*, protects liver from acetaminophen induced toxicity. Biomedical Research. 2006. 17(1): 75-79.
8. Kamath AB, Wang L, Das H, Li L, Reinhold VN, Bukowski JF. Antigens in tea-beverage prime human Vγ2Vδ2 T cells *in vitro* and *in vivo* for memory and non-memory antibacterial cytokine responses. PNAS. 2003. 100(10): 6009–6014
9. Sharma K, Sharma P, Srivastav R, Srivastava A, Sharma D. Pharmacological study of Amalaki with special reference to its antimicrobial action. International Journal of Ayurveda and Pharma Research. 2017. 5(5): 93-96
10. Clark CD, Bassett B, Burge MR. Effects of kelp supplementation on thyroid function in euthyroid subjects. Endocr Pract. 2003. 9(5):363-369.
11. Yadav B, Keshipeddi SR, Bhat S, Singh M. A perspective study of Haritaki. Int J Res Ayurveda Pharm. 2011. 2:1466-1470.
12. Gupta SK, Sharma A. Medicinal properties of *Zingiber officinale* Roscoe - A Review. Journal of Pharmacy and Biological Sciences. 2014. 9(5): 124-129.
13. Fock KM, Khoo J. Diet and exercise in management of obesity and overweight. Journal of Gastroenterology and Hepatology. 2013; 28 (Suppl. 4): 59–63.