Life After Cancer

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For those living with cancer history, life after cancer means finding a new balance – one that celebrates the triumph and relief of completing treatment, recognizing changes or losses the disease has wrought, and assimilates revised perspectives, new found strengths and lingering uncertainties. It is apparent that with improved survival rates (Table1) cancer is becoming a chronic disease rather than a fatal one [1]. However, in most parts of the world, survival rates are grim. Rudimentary health system and lack of financial support means that cancer is pretty much the scourge it has always been.

The impact of cancer and its therapy relates not only to the physical devastation but also to its effect on the psyche, interpersonal relationships and economy. The issues in childhood cancers relate to physical limitations, the need for assistance to restart classes, depression, missing childhood experiences, difficulty in integrating cancer experience into day to day life, transition from paediatric care to adult care setting and post traumatic stress disorder in the siblings and parents. In adolescents and young adults, the diagnosis in crucial development period leads to depression, limited social skills and difficulty in planning for future, establishing independence, coping with neuro-cognitive problems, body image and fertility. In adults, problems relate to difficulties in carrying out family, social and work related

responsibilities which can damage self-esteem, lead to income losses, job loss and forced retirement.

To help cancer patients “**End of Treatment Meetings**” are recommended between treating specialists, patient and relatives / parents to discuss follow up programmes and provide details on basis of diagnosis, investigations and treatment received. They are counselled regarding potential health risks, site specific follow-up recommendations, diagnostic tests for treatment related morbidity, school admissions, employment, insurance cover, marriage counselling and so on. Recommendations are made on life style, follow up care providers and help list of cancer related resources.

Follow-up of cancer patients looks at survival, quality of life, patient satisfaction & cost effectiveness. The role of intensive follow up versus routine surveillance needs to be discussed with the patient. Except for recurrences of solitary resectable tumours, chemo & hormone sensitive tumours, there is no apparent survival advantage of intensive follow up. Instead, it may lead to follow-up related anxiety [2, 3].

In follow up of survivors of breast cancer it is recommended that self examination be done monthly and examination by specialists once in 6 months for 5 years, and once a year thereafter. A mammography is advised annually. Genetic testing for BRACA1&2 gene mutations is at times recommended, as carriers are at high risk for ipsi/contralateral breast and ovarian cancers. The therapeutic options include prophylactic mastectomy, oophorectomy or tamoxifen therapy. On tamoxifen, ultrasonography of uterine mucosa is recommended. In survivors of colon cancer, it is recommended that serum chorionic embryonic antigen be done every 3 months for 2 years; followed by once in 6 months for next 3 years, a check colonoscopy once a year after surgery, and once in 3 to 5 years thereafter. In those surviving after prostate cancer an annual digital examination,

Table 1
Survival rates after cancer

Site/Histo Type	5 yrs%	10 yrs%	15 yrs%	20 yrs%
Pancreas	4	3	2.7	2.7
M Myeloma	29	12	7	4
Oral	56	44	37	33
Colon	61	55	53	52
Breast	86	78	71	65
Testis	94	94	91	88
Hodgkin's Lymphoma	85	79	73	67
Leukaemia	42	32	29	26
Thyroid	96	95	95	94

serum prostate specific antigen every 6 months for 5 years, followed by once a year is recommended. For survivors of ovarian cancers a pelvic exam every 3 months for 2 years, and every 6 months for next 3 years, along with CA 125 antigen is recommended. For testicular carcinomas a self examination is recommended of contra lateral testis, with serum estimations of b-HCG, AFP, and chest radiography annually [4-10].

Psychiatric problems are often seen in survivors. In a large study of 3710 childhood cancer survivors, 88 children required hospitalization for a psychiatric abnormality, 52 % were considered at risk for a psychiatric abnormality for 10 yrs, and 70 % for 5 years. Post radiotherapy patients were at higher risk for schizophrenia. However, there is no evidence of increase in risk for major depressive illness.

Disfigurement, loss of body image, fatigue and hormonal changes may lead to sexual problems in cancer survivors. Counselling on expression of affection by alternate ways, non coital pleasuring and self stimulation is useful. Sildenafil is often of help in patients with nerve sparing and at times with non-nerve sparing prostatectomy [11].

Ability to have genetically related children is an important issue for patients surviving cancer. In women above 40 years of age, 5-6 Gray (Gy) of radiation causes permanent ovarian failure while in those less than 40 years, it takes about 20 Gy. Total body irradiation causes permanent gonadal failure in 90% patients with chances of pregnancy being less than 3%. Pelvic irradiation is associated with spontaneous abortion in 38%, preterm labour in 52%, and low birth infants in 62% patients [12].

With patients living longer, second malignancy is being seen more often and is usually dose related. The median time to develop a second cancer after radiation varies from 4 to 40 years; radiogenic leukaemias develop usually after 4-8 years and solid tumours after 10 – 40 years. The risk is higher when irradiated before the age of 15 years. In patients with treated Hodgkin's lymphoma, the risk for second malignancy is about 20% in 20 years, and 25% of second malignancies after Hodgkin's disease are leukaemia's. In patients of acute lymphoblastic leukaemia, treated with cranial radiation, the risk for brain tumours is estimated at 3%, at 20years. The second malignancies commonly associated with chemotherapy are, acute myeloid leukaemias, acute lymphoblastic leukaemias, chronic myeloid leukaemia and myelodysplastic syndromes [4].

There are a few common steps to prevent second malignancies; these include life style changes in the form of regular exercise, intake of 4-6 helpings of vegetables and fruits a day, treatment of gastro oesophageal reflux disease (to prevent Barrett's oesophagus & adenocarcinoma), *Helicobacter pylori* (for prevention of cancer stomach & MALT lymphoma), and of hepatitis virus B & C infections. Avoidance of smoking, obesity and alcohol is equally important.

In Armed Forces we need to move in the direction of establishing "After Cancer Clinics" running at dedicated time and place with facilities for screening, education and referral to specialized centres and having doctors and nurses with experience in after treatment problems.

References

1. Jemal A, Murray T, Samuels A, et al. Cancer Statistics, 2003. *CA Cancer J Clin* 2003; 53:5-26.
2. Edelman MJ, Meyers FJ, Siegel D. The utility of follow-up testing after curative cancer therapy. A critical review and economic analysis. *J Gen Int Med* 1997; 12:318-31.
3. Lampic C, Wennberg A, Schill J, et al. Anxiety and cancer-related worry of cancer patients at routine follow-up visits. *Acta Oncol* 1994; 33:119-25.
4. Herman Kattlove, Rodger J. Winn. Ongoing care of patients after primary treatment for their cancer. *CA Cancer J Clin* 2003; 53:172-96
5. Smith TJ, Davidson NE, Schapira DV, et al. American Society of Clinical Oncology 1998 update of recommended breast cancer surveillance guidelines. *J Clin Oncol* 1999; 17:1080-2.
6. Kauff ND, Satagopan JM, Robson ME. Risk-reducing salpingo-oophorectomy in women with *BRCA1* and *BRCA2* mutation. *N Engl J Med* 2002; 346:1609-15.
7. Fisher B, Dignam J, Wolmark N, et al. Tamoxifen in treatment of intraductal breast cancer: National Surgical Adjuvant Breast and Bowel Project B-24 randomized controlled trial. *Lancet* 1999; 353:1993-2000.
8. Desch C, Benson AB, Smith TJ, et al. Recommended colorectal cancer surveillance guidelines by the American Society of Clinical Oncology. *J Clin Oncol* 1999; 17:1312
9. Scardino PT, Bahnson RR, Hanks GE, et al. Clinical Practice Guidelines in Oncology, Prostate Cancer. Version 1. National Comprehensive Cancer Network, 2002
10. NIH Consensus Development Panel on Ovarian Cancer. Ovarian Cancer. Screening, treatment, and follow-up. *JAMA* 1995; 273:491-7
11. Valicenti RK, Choi E, Chen C, et al. Sildenafil citrate effectively reverses sexual dysfunction induced by three-dimensional conformal radiation therapy. *Urology* 2001; 57:769-73.
12. Simon B, Lee SJ, Partridge AH, Runowicz CD. Preserving fertility after cancer. *CA Cancer J Clin* 2005; 55:211-28.