Tuesday, 25 September 2007

Special session (Tue, 25 Sep, 09:00–11:00)
European Society for Medical Oncology (ESMO)

56 ESMO Award

Neither the sun nor death can be looked at with a steady eye

J.B. Vermorken. *Belgium*

Abstract not received.

57 INVITED

Epidemiology of long-term cancer survical

S. Fossa. *The Norwegian Radiumhospital, Department of Medical Oncology and Radiotherapy, Oslo, Norway*

National prevalence figures of cancer are generally related to the true underlying occurrence of a specific malignancy in the population, the diagnostic intensity, cancer-specific survival (and thus tumor biology and treatment efficacy), age at diagnosis and life expectancy. Due to increasing incidence figures of cancer, improved prognosis and rising life expectancy in the Western world the prevalence of individuals with at least one cancer diagnosis is growing in
the society. About 3% of individuals in the population have a history of cancer, corresponding to approximately 10 million persons in USA (2004). Approximately 60% of these persons are alive =5 years after their first malignant diagnosis, more females than males and, though not all of them tumor-free. About 2/3 of cancer patients are 65 years or older, and in these individuals age-related co-morbidity reduces daily functioning and quality of life at a larger degree than in persons without a cancer history.
In countries with high opportunistic PSA screening prostate cancer is the most frequent diagnoses in males, whereas breast cancer has the highest prevalence in women, in particular in countries with mammography programs. High prevalence are, however, also evident for more rare malignancies (Hodgkin's lymphoma, childhood cancer, testicular cancer) due to young age at diagnosis and high cure rates.
Cure has its price: Especially young cancer survivors are at a considerable risk to develop treatment-related co-morbidity (cardiovascular disease, second cancer, gonadal failure) often developing 1−2 decades after treatment and increasing these cancer survivors' mortality risk as compared to the general population.
Clinicians challenge is to reduce the risk of treatment-related long-term morbidity as much as possible by modifications of therapy, though without reduction of high cure rates, and by early detection and treatment of life-threatening long-term side-effects.

58 INVITED

Late effects of long-term childhood cancer survival

H. Kosmidis. *Childrens Hospital A. Kyriakou, Pediatric oncology, Athens, Greece*

Children suffering of cancer are effectively treated and most of them are cured of their disease. Today 1/570 young adults is long term survivor of childhood cancer. Children tolerate acute toxicities but are more vulnerable to late toxicities. Late effects of long term survivors are biological and psychosocial. Functional and cosmetic problems are documented in 11−35% of survivors.
Biological late effects are classified in 3 groups: (A) *Late effects from various organs*: Growth and musculoskeletal disorders: children treated for brain tumors and leukemia with prophylactic or therapeutic CNS RT are shorter than peers as are children given RT to the spine for Hodgkin's and Wilms. Scoliosis, kyphosis, bone hypoplasia, amputations are late effects attributed to surgery and/or RT. Neurological late effects are mainly seen in brain tumor and leukemia survivors treated with RT. In this group drop of IQ, short attention span and learning problems are seen. Endocrine disorders: Thyroid disorders biochemical and/or clinical is the commonest endocrine late toxicity and is due to RT. Gonadal problems are also documented both in men and women and are due to RT and chemotherapeutic agents (alkylating agents). Heart and lung toxicity: Anthracyclines and mediastinal RT are the main cause of cardiotoxicity especially if total dose exceeds 500–600 mg/m^2. Lung toxicity is attributed to bleomycin and RT. Renal toxicity is due to nephrotoxic chemotherapy (platinum derivatives, cycloand ifosfamide). (B) *Fertility and offspring*: Alkylating agents and abdominal RT are the main causes for infertility however offsprings are usually normal and they have no excess risk for cancer. Genetic counselling is important in survivors cured of retinoblastoma and Wilms tumor. (C) *Second malignancies*: Survivors have 10−20 times greater risk of second cancer which appears earlier if is due to chemotherapy and later if is due to RT. Secondary leukemias may have chromosome 7 or 11q23 cytogenetic anomalies.
Psychosocial late effects: Adolescents and young adults cured of cancer experience problems with education and adjustment. Anxiety, depression metatraumatic stress, isolation are some of the late psychosocial effects. It is very important when treating children with cancer to set up the goal for life with quality, to inform them about late toxicities and to follow survivors in the late- effect clinics.

59 INVITED

Cancer survivorship: a new challenge in delivering quality cancer care

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There are more than 10.5 million cancer survivors in the USA and over 22 million worldwide. These individuals represent the success of contemporary oncology care. Nevertheless, there may be a price paid for improved survival, including physical, emotional and social late effects that limit the quality of life of survivors. With the growing number of cancer survivors, and the aging of the population that will increase the number of new cancer patients in the coming years, the cancer care system must find effective ways to improve the quality of care of cancer survivors. This will require better coordination of post-treatment care with primary care physicians, as well as informing and educating patients and their physicians about the potential late effects of treatment. Furthermore, organized strategies of secondary cancer prevention, surveillance for recurrence and health promotion must be included, to maximize the health outcomes in survivors. This presentation will discuss evolving efforts in the USA that are beginning to address these issues.

60 INVITED

Cognitive dysfunction in cancer survivors

G. Steineck[1], J. Skoogh[1], U. Stierner[2], E. Cavallin-Ståhl[3], M. Gatz[4], B. Johansson[5]. *[1]Sahlgrenska Academy, Clinical Cancer Epidemiology, Göteborg, Sweden; [2]Sahlgrenska Academy, Oncology, Göteborg, Sweden; [3]Lund's University, Oncology, Lund, Sweden; [4]University of Southern California, Psychology, Los Angeles, USA; [5]Göteborg University, Psychology, Göteborg, Switzerland*

Long-term twin cancer survivors have an increased frequency of cognitive dysfunction as compared with their co-twins not having had cancer. Among women having received cytotoxic drugs to treat breast cancer, an increased risk of a sub-capacity of all investigated cognitive domains has been documented by neuropsychiatric tests. Impairment in speed of information processing and defective psychomotor function may be particularly frequent. The potential confounding effect of hormonal therapies and stress-induced cognitive impairment needs to be excluded to infer causality. Except for largely anecdotal reports of "chemobrain", we by and large lack knowledge on the subjective experience of cognitive dysfunction in cancer survivors. We have made in-depth interviews with 41 subjects, focusing how cognitive dysfunction may influence daily activities and decrease quality of life. One testicular-cancer survivor has organized his life with sheets of paper, everything he needs to remember he immediately needs to write down, and the papers are put in different strategic places, e.g. adjacent to his cellular phone. He does not remember accurately a television programme; when he follows a coherent series of programs he records them and watches all together. Another man said he easily could solve problems within the discipline physics before being treated with cytotoxic drugs, but that this ability drastically diminished after the therapy. Other reported issues by the testicular-cancer survivors were problems initiating activities, problems finding words, reduced frequency of social activities, considerable fatigue after work, problems to deal with several issues concomitantly, and being clumsy. Of course, before having performed a quantitative comparative study we cannot ascribe any of these complaints to be causally related to the cytotoxic-drug therapy. Based on the in-depth interviews, we constructed a study-specific questionnaire, validated it fact-to-face and made a preparatory study. In a nation-wide population-based study, we have enrolled 800 testicular-cancer survivors having been treated with cytotoxic chemotherapy 1980 or later, 400 testicular-cancer survivors not having been treated with cytotoxic chemotherapy and 400 population controls. Preliminary results for occurrence and subjective experience of cognitive dysfunction in testicular-cancer survivors will be given.