Symposium article

Quality of life in elderly cancer patients

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Summary

Increasing age is a major risk factor for developing cancer and the number of older people is rapidly expanding. Therefore, cancer in the geriatric population is becoming an emerging problem.

Older patients are extremely heterogeneous. Instruments collecting information related to comorbidity and disability, (which have both been demonstrated to affect the survival of elderly patients) may help treatment decision.

The G.I.O.Ger (Gruppo Italiano di Oncologia Geriatrica) has validated a Comprehensive Geriatric Assessment (CGA) scale for geriatric cancer patients, and we recommend its use in clinical practice. Our findings suggest that cancer adversely affects physical performance and psychological status less than other comorbidities. Many aspects of physical limitations are not totally recognised by performance status, in particular those aspects of daily life that require instrumental activities and that may affect adherence to diagnostic or therapeutic protocols.

Quality of life as a main objective in the management of elderly cancer patients is now recognized by many clinicians.

In clinical practice, quality of life means maintenance of function and symptom control, and quality-of-life instruments rated by the patient rather than by clinicians should be preferred. Whether it is preferable to use cancer-specific or generic instruments is an ongoing debate.

Key words: cancer, elderly patients, geriatric assessment, quality of life

Introduction

At the end of the 19th century the average life expectancy in industrialised countries was slightly more than 40 years old. A hundred years later, a remarkable increase in lifespan has been recorded. In Italy, men and women reach the age of 73.6 and 80.2 years, respectively [1]. The number of elderly people and particularly those over 85 years is likely to double over the next 30 years. This is at present the most rapidly expanding part of the population due to the decreasing birth rate and increased life duration in most developed countries [2].

Cancer-related deaths will rapidly become the most common cause of mortality among those 65 and over [3], as cardiovascular deaths are decreasing.

The incidence of most malignancies increases with age: more than 50% of all new diagnosis of cancer and more than 60% of all cancer deaths occur in persons older than 65. Despite the advances in cancer treatment over the past 20 years leading to a reduction in mortality for people under age 50, cancer-related deaths for older patients have not decreased [2].

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These observations influence the current perception of the elderly as frail and dependent individuals. They impact on the poor comprehension that older patients, their families and their physicians have about the importance of properly managing elderly cancer patients. This misunderstanding is worsened by the scarcity of clinical trials specifically designed for the aged. The overall result is that most clinicians are sceptical about the effectiveness of cancer treatment in elderly patients, and the quality of care for these patients is poor.

Cancer in the elderly: Do we need a different approach?

The sites as well as the clinical characteristics of tumours vary, in some cases, according to age: for instance ascending colon cancer and distal stomach cancer are more frequent in the younger patients [4–6].

Cancer diagnosis in the elderly is usually delayed compared to younger patients; this fact is partially connected with the tendency to underestimate symptoms, which are often ascribed to aging or other pre-existent pathologies; there is also reluctance towards diagnostic tests, and secondary cancer prevention programmes are not aimed at the elderly [7].

The differences from a clinical point of view concern the patient rather than the tumour stage or its most striking location. Age as such is not an adequate parameter for evaluating health conditions nor for defining an elderly patient. The considerable differences among elderly patients account for the variability and difficulty of the treatment.
As a practical definition one may suggest ‘a patient is old when general health status interferes with the management of cancer’. The decreases in functional reserve and the increased comorbidity are key factors in the observed differences.

Geriatric evaluation by means of standardised tests definable as comprehensive geriatric assessment are needed and research is very active in this respect; a close co-operation between oncologists and geriatricians is strongly desirable [8].

Cancer in the elderly: Do we have a state of the art?

Older patients are more heterogeneous than their younger counterpart, not only because of comorbidity, physical and psychological disabilities but also because of the generally worse social and economic conditions under which they live.

This makes their assessment, diagnosis, prognosis and treatment more difficult.

Treatment efficacy and feasibility are poorly correlated with chronological age, except in cases in which haematological toxicity is involved, but they are correlated with functional status and comorbidity [9]. Functional impairment and decreased performance status in elderly cancer patients are the consequences of comorbidity rather than the cancer itself [10].

Therefore, assessment of comorbidity and disability is of fundamental importance in the management of elderly patients, as well as of elderly cancer patients, and should direct the choice of oncological treatment.

Quality-of-life issues

The evaluation of quality of life has become increasingly important in the last two decades due to prolonged life expectancy in the general population and the high prevalence of debilitating or disabling diseases.

Assessing quality of life in elderly cancer patients remains a controversial area because of uncertainty about the methods of measuring, the directions for research and applications [11–12].

Geriatric assessment tools (Mental Status, Cognitive Status, ADL, IADL) represent important additional points not to be undervalued in the routine assessment. Although several instruments for the assessment of quality of life have been validated, none have been tailored to the special requirements of the older patients. As a possible consequence, there is little research on quality-of-life issues in this group of cancer patients.

To the best of our knowledge, the only currently existing randomised trial specifically designed for the subgroup of elderly cancer patients in which quality of life was evaluated and considered a primary objective is the Elderly Lung cancer Vinorelbine Italian Study (ELVIS) [13].

This phase III trial randomised 154 elderly patients with advanced non-small-cell lung cancer (NSCLC) to receive best supportive care (BSC) plus vinorelbine or BSC alone. The aims of the study were quality of life and survival. The EORTC QLQ-C30 and the specific QLQ-LC13 were used for the quality-of-life evaluation. The ELVIS investigators, who had initially agreed on the uncertainty between the two arms, became increasingly reluctant to randomly assign patients because the control arm lacked chemotherapy. Furthermore, an increasing number of patients refused the informed consent because they requested treatment. The ELVIS trial was stopped early because of these problems with enrolment and an interim analysis was performed. In the ELVIS trial, single-agent vinorelbine prolonged survival of elderly patients with advanced NSCLC and had a positive impact on quality of life compared to supportive care. Survival advantage was limited with a median survival gain of seven weeks, but it is indeed comparable to that reported in the metanalysis with cisplatin-based regimens in adult patients. Functional scales were consistently better for the patients receiving chemotherapy than for the control patients, although statistical significance was reached only for cognitive functions, and was borderline for global health status. Vinorelbine-treated patients scored clearly higher than control patients for some lung-specific items (pain and dyspnea), but they scored significantly lower for some treatment toxicity-related items (constipation, nausea and vomiting, hair loss and peripheral neuropathy). The treatment was well tolerated and it was stopped in only five (7%) cases because of WHO grade 3–4 constipation in four patients and grade 2 heart toxicity in one case. The ELVIS trial experience shows that both physicians and elderly patients ask for treatment, and has demonstrated that chemotherapy may be a valuable treatment option for elderly patients with advanced NSCLC. The reported results are comparable to those of young adults. The quality-of-life score at diagnosis has been shown to be highly predictive of survival, as well as of the number of chemotherapy cycles that the patients would receive [13].

Another study on seriously ill patients has unexpectedly shown that they prefer a longer, though low quality life, rather than a healthy shorter one; this choice was more marked with the increasing age of patients [14].

Although many oncologists claim that quality of life is the primary objective of treatment in elderly patients with cancer, to date we have studies focused on survival, or activity and toxicity of chemotherapy, but none of them, except for ELVIS, reported significant data about quality of life.

Conclusion

The proper management of elderly cancer patients requires a different approach. This approach has to take into account the peculiar characteristics of these patients, and should include a detailed individualised assessment
called the Comprehensive Geriatric Assessment, which includes analyses of comorbidity, disability and socio-economic status.

In clinical practice, we can consider two broad groups of patients. In the first, the patients are 65 to 85 years old, generally healthy, and completely independent in the daily care of themselves, social relations and pleasurable activities. In the second group, patients are older, and/or have one or more debilitating conditions and are increasingly dependent on daily care.

The first group includes elderly patients requiring specialised care not dissimilar to that provided to younger subjects. The second group includes the frail patients who are at high risk to develop life-threatening toxicity and require individualised treatment. CGA allows us to discriminate between the first and the second category.

Until recently, the only form of cancer management tolerable for frail persons was palliation; today the development of supportive care and of new agents with different toxicity profiles represents a novel opportunity to treat such patients [15, 16].

Too many elderly patients in both groups are still receiving inadequate treatment and symptom control, possibly because of different perceptions about quality of life issues.

In future studies, the importance of the patients' subjective assessment and not the health care provider's should remain central to any consideration of treatment. Physicians and other health care providers will, however, need to pay attention to the results of quality-of-life research in managing older cancer patients.

One objection to such studies is that collecting information on the global health status of the older patient is a time- and money-consuming process, and administrators need to be convinced that the added clinical value is well worth the effort. The combination of a self-administered questionnaire and a structured interview seems to be the best approach to the collecting of such information.

### References


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