Epidemiology of cancer in the elderly

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In the last half-century, changes in population demography have been observed in western countries. There has been an increase in numbers of elderly people as a proportion of the total population. It has been estimated that in industrialized countries, 20% of the population is over 65 years of age, a substantial increase in recent decade (1).

With the aging of the general population, cancer in the elderly has become increasingly common. In the developed countries, about 60% of cancer patients are aged 65 years and over. Age-specific incidence rates for various cancers are several-fold higher in older than in young patients. It is estimated that individuals who are over 65 years of age have 11 times greater risk of cancer than people under the age of 65 years. In the elderly, the most common cancer sites are breast, large bowel and lung in women and prostate, lung and large bowel in men.

In our country, about 50% of cancer diseases occur in people aged over 64 years. Lung, large bowel, breast and prostate are the most frequent cancer sites (2). At the Institute for Oncology and Radiology of Serbia, there are about 1200 (25%) newly registered patients aged over 65 each year.

It is commonly believed that the diagnosis of cancer in the elderly is delayed for a variety of reasons. For example, symptoms are attributed to aging or other co-existing diseases there is a lack of awareness of bodily functions, fear of cancer, embarrassment, financial reasons etc. (3). Tests used for screening or early detection often perform differently in older patients.

Aging also has an impact on cancer biology and behavior, with some cancers evolving more slowly and the others becoming more rapidly invasive in older patients (4).

According to the data from the hospital registry of the Institute, there are some differences in the epidemiological characteristics of most frequent cancers between patients over 65 years and younger ones.

About a third of lung cancer patients were over 65 years of age. Overall, those patients were presented more frequently with the localized disease at diagnosis and they had a different distribution of histological types in comparison with younger patients.

In breast cancer patients, the size of the tumor at diagnosis was on average smaller in younger groups than in older ones, both according to the clinical and pathological TNM. However, there was no significant difference either in the lymph node involvement or in the presence of distant metastases at diagnosis. The share of ductal carcinoma in all breast cancers was lower in older patients than in younger ones (46 vs. 51%) while the situation was the opposite for lobular carcinoma (34 vs. 25%). However, there were no differences in the tumor grades. Hormonal receptors were more frequently positive in older women. About 80% of patients in both groups underwent surgery; chemotherapy and radiotherapy were significantly less frequently administered in older women as opposed to hormone therapy.

As for gynecological cancers, 21% of patients with cervical cancer and 49% of patients with endometrial cancer were aged over 65 years. Older patients with cervical cancer had a more advanced stage at diagnosis while no age-related differences were found for endometrial cancer.

REFERENCES