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Colorectal Cancer Treatment and Follow-Up in the Elderly: An Inexplicably Different Approach

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The incidence of colorectal cancer increases as age progresses. At present, elderly patients have received substandard cancer treatment not supported by ''evidence.'' Geriatric assessment should be performed preoperatively and selected elderly patients must be offered standard surgical treatment receiving the same complementary therapies as a younger patient. It should be stressed that elderly patients should not be deprived of their decision-making role. In our experience, more than 43% of patients with colorectal cancer are ≥70 years of age, and we believe that they should receive the same type of follow-up. This would allow for the detection and removal of polyps, treatment of malignant tumors, and psychological support similarly to younger patients. Significantly, in our experience, the incidence of reoperation for neoplastic disease is similar in the two patient populations.

Key words: Colorectal cancer – Elderly – Follow-up – Treatment – Survival

At present, in the United States and in France[1] women and men aged 70 years have a life expectancy above or slightly below 15 years. This is a life span long enough to plan and make important decisions, like those involving possible curative cancer treatments, which, if not started, could unequivocally compromise both life expectancy and quality of life.[2–4]

Another indisputable issue is that the incidence of colorectal cancer increases as age progresses,[3] thus

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becoming a disease proper to old age.[1,5–7] Colorectal cancer is the most common tumor in patients more than 70 years old.[8,9]

A Reasoned Oncologic Treatment

At present, elderly patients have not had the same oncologic ''privileges'' as younger patients,[9] and 50% of cases, or even more, have received substandard cancer treatment.[3–5,8,10–12] Often this is not related to the anatomopathologic features of the tumor,[13] to the type of medical procedure,[4] or to the little clear evidence in the literature, but rather to the clinical prejudices associated with the mythical, but not sufficient, ''*surgeon's gut feeling*''[8] or to the fatalistic approach of the elderly population.[13] Paradigmatically, in Europe, the age factor alone influences the percentage of overall surgical resections,[10] and, despite the many reports, about 50% of elderly patients treated for stage III colorectal cancer, both in Europe and the United States, does not receive any adjuvant chemotherapy treatment.[1,2,11,14]

We cannot deny that not all elderly people have a biologic age younger than their chronologic age. More frequent comorbidities,[3,4,6,9,14,15] poor functional reserves, precarious physical conditions, doubtful mental health, poor rehabilitative potential, and poor social support[10] are all factors that can have a catastrophic impact on optimal treatment.

Therefore, the goal of the physician must be to select elderly patients who are suitable for a standard oncologic treatment. Using scores, such as Charlson's comorbidity score, Comprehensive Geriatric Assessment, Physiologic and Operative Severity Score, or Acute Physiology and Chronic Health Evaluation (APACHE)[2,4–6,8,12] which identify ''fit'' patients who can receive the same treatment as that offered to younger patients, also identify ''vulnerable'' patients who need a tailored treatment, and finally ''frail'' patients, who will probably not tolerate a radical therapy proper to the disease.[16]

Another certainty is that at present, these patients are diagnosed later because of the longer interval between the onset of the first symptoms and the diagnosis.[5,7,12,13] It is also true that elderly patients often delay medical consultation,[9] and often the doctor's or family's attention is different for a person with a ''limited'' life expectancy. Therefore, more urgent operations are required, with a negative impact on postoperative mortality, morbidity and prognosis,[3–7,9,10,12] the staging is worse, and there is also the reluctance of the surgeon to offer to an elderly patient with an advanced neoplasia an optimal curative operation[2,4,9,10] despite the fact that often the tumors in these patients are more amenable to treatment (right colon) or less undifferentiated.[3–5,15] Therefore, there is no reason for the ''selected'' elderly patient with a ''not advanced'' cancer stage to be treated surgically, or even laparoscopically, in a manner different from that of a younger counterpart. In this regard the SIOG (International Society of Geriatric Oncology)[9] clearly recommends that ''emergency colorectal surgery should be avoided; elective surgery should be the pathway of choice; elderly patients should not be excluded from total mesorectal excision for the treatment of rectal cancer and from potentially curative resection of their hepatic metastases.''

Even more controversial is the use of complementary therapies. Emblematically, Köhne *et al*,[1] in a well-selected group of elderly patients treated for colorectal cancer, report an increase in 5-year survival rate due to a decrease in postoperative mortality and an increase in curative resection, but not with the use of adjuvant therapy, which is still underused. Both adjuvant chemotherapy and radiochemotherapy are ''drastically''[15] less used than in younger patients.[2,5,7,9,11,12,16] This is not because of the ''evidence'' in the literature or the refusal of the patient, who often is willing to receive even a ''strong'' chemotherapy.[16] If a higher noncancer-related mortality is reported in elderly patients receiving adjuvant chemotherapy, it must be stressed that compared to younger patients, the treatment is not less effective, and toxicity only increases due to some minor complications with a similar survival increase.[1,2,9,13–17] Actually, the SIOG[9] recommends the use of preoperative radiotherapy for the resectable rectal cancer in the elderly patients, and in patients with stage III, the use of adjuvant 5-flurouracil-based chemotherapy in continuous infusion, capecitabine, with regard to renal function, and oxaliplatin.[17] With regard to chemotherapy, some investigators[11] report that elderly patients accept the toxicity and the discomforts associated with the treatment, as they are seen as a surrogate of efficacy,[16] which does not affect their quality of life, but rather improves it.[18] They have lower expectations, pragmatically more than younger patients, they need to fight every day against cancer.

More data are also necessary for the targeted therapy. Because of ''the paucity of clinical trials and the lack of studies involving frail subjects,''[17] again, we need ''evidence'' to open up a new perspective.

Nevertheless, it is difficult to recommend chemotherapy, as a rule to all elderly patients,[9,10] especially if ''very old'' or ''non-fit'' who should require a rationally tailored treatment.[17] The decision must be made by mutual consent between the physician and the patient taking into consideration comorbidities, performance status, and, last but not least, their own preference.[2,9]

Elderly patients should not be deprived of their decision-making role. Most patients ask for correct information, which would give them the possibility to know the diagnosis, the risks associated with cancer treatment, and the prognosis to actively plan their future. The reality is often different: 50% of doctors are reluctant to do so, they do not give adequate information because they think elderly patients, rather than younger patients, prefer to delegate the decision-making to someone else.[19]

Finally Basili *et al*[5] reported data easy to objectify and incontrovertible: the majority of elderly patients survive for 5 years or more after colorectal resection and, along with other investigators, they reported no significant difference in cancer-specific long-term survival between elderly and younger patients with the same cancer stage.[3,5–7,9,10,13,20] The age factor may have a negative impact only on the short-term survival.[10] The elderly patients who survive the first year have a prognosis similar to younger patients.[14]

Since early 1990s we have been dealing with the follow-up of patients operated on for colorectal cancer (1060 patients) and, although we know that our series is monocentric and diluted by almost 20 years, our data are similar to those in the literature. In our experience, patients ≥70 years of age amount to 43.4%; in the same group of patients the incidence of palliative treatment, probably because of all the already mentioned reasons, is higher than that recorded in the group <70 years (22.8% versus 17.3%; $P = 0.03$), and the perioperative mortality of radically treated patients, even if remaining at acceptable levels, is twice as much than that of younger patients (4.8% versus 2.2%; $P = 0.04$). The 5-year disease-free interval is 64.2% in patients <70 years of age and only 36.9% in patients ≥70 years of age ($P < 0.0001$). If we exclude for older patients a statistically significant difference in drop-out rate (31.4% versus 13.4%; $P < 0.0001$), which may affect the disease-free interval, we actually have not found a clear explanation to this difference. Should we think that this worse prognosis is suggestive of a less aggressive approach by the surgeon? We have no data to deny it. Definitely, given the limitations of a retrospective evaluation, a lower percentage of our older patients received complementary therapies.

Reasons for a Follow-Up in the Elderly

Is it appropriate for an ''elderly'' patient to undergo routine follow-up after radical surgery for colorectal cancer? We need to ask ourselves why we also need to give reasons for the exclusion, because these patients want to know and understand, and it is difficult, especially when all the rare reports state the opposite and they are also more willing to undergo preventive examinations, as suggested by general practioner, compared to patients not operated for cancer.[21] Therefore, either we do not offer follow-up care to all, or we also include elderly patients, especially ''fit'' ones, with a good quality of life and with adequate family and social support.[2]

The main concern of a caring family is that scheduled screening examinations may cause too much ''stress'' in vain and worsen the quality of life. In 2000 we[22] published the data about 100 of our patients radically treated for a colorectal cancer who were administered three tests to assess if the follow-up was for them a cause of stress or reassurance. The average age of patients was 66 years. The results showed that they, elderly and younger patients, believed that the follow-up was an important step that allowed them to process their distress and transform it into anxiety, thus facilitating their future life experiences. Therefore, in our experience the follow-up, and above all the relationship with the clinician, is not a cause of stress, but it is actually helpful.

Based on our experience, we want to disclaim the idea that both an objective ''shorter'' life expectancy and the inevitable co-morbidities would make all follow-up examinations useless. It should be reported, that in our experience, the percentage of elderly patients who died during the follow-up for other intercurrent diseases was slightly higher than the younger patients (6.8% versus 3.3%; $P = 0.02$). A higher percentage that seems to us related to the ''natural course of the life,''[15] and not too relevant if used as the reason not to conduct routine follow-up examinations.

Finally, one could also think that the follow-up of elderly patients may be useless as the treatment may be more difficult in case of recurrence or onset of a different disease. In our experience this is not the case. Of all our patients, 28.3% among those <70 years of age, underwent endoscopic polypecto-

my. The gap with respect to elderly patients is not too wide (16.9%; $P = 0.0002$). If we consider reoperations for a neoplastic disease (related to the primary disease or coincidental), the incidence between younger and older patients is similar (14.2% versus 10.1%; $P = 0.08$). In this respect we should also consider that 80% of colorectal cancer recurrences occur within 2–3 years, a relatively short period of time also for an elderly person, unlike other neoplastic diseases like breast cancer.[16] From this perspective, it seems that the SIOG[9] recommendations are clear: ''Elderly patients should be followed up with routine colonoscopy …'' even if, probably, the risk of complications is higher because, as reported by Cooper *et al*[23] in a recent review of the literature, the use of the colonoscopy in the follow-up of the patients aged ≥80 years is lower.

In conclusion, in our opinion a standard surgical treatment must be offered to ''selected'' elderly patients with colorectal cancer and they must receive the same complementary therapies of a younger patient. In addition, patients more than 70 years of age should receive the same follow-up as their younger counterparts, and not a surrogate that would not produce the same favorable results.[21,24]

Significantly, to our knowledge, ''specific'' follow-up protocols for the elderly were not even recommended by the 2005 update of the American Society of Clinical Oncology practice guidelines[25] and more recently by Cooper *et al*,[23] who reviewed the international guidelines on colorectal follow-up.

At present, ''frail'' patients remain the real challenge and it is unclear what is the most appropriate approach, which, as Ugolini *et al*[8] said recently, is ''a key point in the everyday life of a surgeon.''

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