

Correspondence on “Quality is more important than quantity: pre-operative sarcopenia is associated with poor survival in advanced ovarian cancer” by Polen-De et al

Dear Editor,

We read with interest the study by Polen-De and colleagues¹ regarding the relationship of muscle quantity and quality with prognosis in patients with advanced ovarian cancer. They concluded that sarcopenia was associated with poorer survival, particularly among patients aged >60 years. We propose some considerations based on recent evidence plus our own research.

Ovarian cancer represents an optimal model to explain the mechanisms of sarcopenia, evidenced by hypercatabolic processes induced by tumor-associated inflammation and age-related inflammation, and in particular mediated by interleukin-6.² Sarcopenia is part of the tolerance phase typical of advanced cancer, in which macrophages and pro-inflammatory cytokines play essential roles.³ However, this phase is reversible if chemotherapy or surgery reduces the tumor burden and, thus, inflammation. In this sense, we recently demonstrated that a decreased neutrophil-to-lymphocyte ratio—a validated prognostic index indicative of the degree of inflammation—during neoadjuvant chemotherapy is associated with an objective clinical response and is predictive of progression-free survival.⁴ Therefore, prognosis remains linked to therapeutic efficacy.

In this regard, one notable finding in the article by Polen-De et al is that the group with the most sarcopenia and poorest prognosis also had the highest amount of residual disease. In the final multivariate analysis, skeletal muscle gauge was not predictive of mortality, but sub-optimal cytorreduction was. Then, sarcopenia/cachexia must be distinguished between responsive or operable patients and patients who are chemoresistant or not susceptible to radical surgery, as well as

among different histotypes, which represent important prognostic factors.⁵ Ultimately, it is worth remembering that sarcopenia and cachexia are reversible, not pre-treatment conditions that preclude the maximum therapeutic intent. We believe sensitivity to chemotherapy, capacity for radical surgery, and histotype remain the primary prognostic factors.

Logically, we agree that early simultaneous supportive care and pre-habilitation are essential.

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