Early management in cancer and a proposal of a new index: I-Score

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Introduction

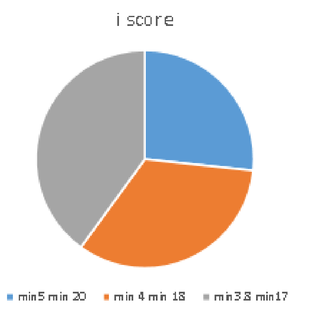
Cachexia is a multifactorial syndrome characterized by significant weight loss, muscle wasting, and decline in overall physical function, often observed in patients with chronic diseases, especially in cancer patients. It is a syndrome generated by complex metabolic, hypothalamic and disease-related factors. Its early management is crucial to improve clinical outcomes, quality of life, and treatment efficacy. The pathogenesis of cachexia involves a complex interaction between metabolic dysregulation, inflammatory cytokines, and alterations in appetite regulation. Early identification of cachexia requires a comprehensive evaluation that includes routine screening for weight loss, assessment of muscle mass, and assessment of patient-reported outcomes to assess its functional impact.

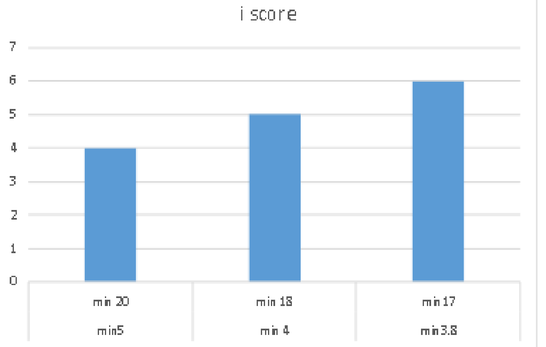
Methods

Intervention strategies focused on nutritional support, physical activity, and pharmacological approaches tailored to the condition. Patients underwent tests such as bioimpedance analysis Glim and Esas. Nutritional interventions with food supplements slowed energy deficits and promoted the maintenance of muscle mass, this was demonstrated with blood tests performed over three months. Pharmacological support, such as appetite stimulants (e.g. megestrol acetate) and anti-inflammatory agents, showed promise in the clinical setting, as demonstrated by blood tests for inflammatory proteins, prealbumin, and protein profile. We also proposed a new I-Score index based on the relationship between BMI and phase angle. This index could help us understand the patient's performance status.

Results

We noted the anthropometric parameters, integrated them with the results of the questionnaires and the evaluations of bioimpedance and blood tests. We applied the I-score and the results currently allow us to perform a first meta-analysis, according to which the I-score decreases if the patient has a better PS. We are continuing the study to evaluate c





Conclusions

Early diagnosis of cancer-related malnutrition, measured by MNA, Glim, Esas questionnaires, blood tests and bioimpedance analysis with application of the FFMI index, is effective in personalizing supportive therapy for each patient. The I-Score could help evaluate PS and quality of life over time. Early and integrated use of these indices could allow the creation of tailored therapy in oncological support treatments, improving quality of life. Early nutritional support with oral nutritional support allows for better caloric intake, contributing to improving the performance status of the oncological patient.

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