Clinical Value of Nutritional Status in Cancer: What is its Impact and how it Affects Disease Progression and Prognosis?

Mantzorou M, Koutelidakis A, Theocharis S, Giaginis C.

Malnutrition is a common finding in cancer patients, which can affect disease progression and survival. This review aims to critically summarize the prognostic role of nutritional status, from Body Mass Index (BMI) and weight loss to nutrition screening tools and biochemical indices, in cancer patients. According to the currently available data, Prognostic Nutritional Index (PNI) was a significant prognostic factor of patients' survival, both in univariate and multivariate analyses. Pre-operative albumin was also correlated with worse outcomes, being an independent prognostic factor of survival in several studies. BMI was also well-studied, with contradictory results. Although, lower BMI was found to be an independent prognostic factor of shorter survival in some studies, in others it did not have an impact on survival. In this aspect, this review highlights the significant prognostic role of nutritional status in the disease progression and survival of cancer patients. Further, good-quality prospective studies are needed in order to draw precise conclusions on the prognostic role of specific nutritional assessment tools, and biochemical indices associated with the nutritional status in more cancer types, such as liver, breast and prostate cancer, and hematological malignancies.

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