Nutritional Support in Malnourished Medical Inpatients

Patients who are malnourished or at nutritional risk do tend to have poorer outcomes compared to patients who are relatively healthier when they undergo surgery or are sick. Poorly nourished patients do not have the reserves to fight off illness, and in many cases, are also immunosuppressed with delayed wound healing.

Malnutrition is a major public health problem. Approximately 30% of patients who are admitted to hospitals have some degree of malnourishment. The reasons for malnourishment are manifold ranging from immobilisation, dementia, advanced age, being bed-ridden or malignancy. With malnourishment, these patients also suffer from dysfunctional hormonal secretion, protein breakdown, loss of energy reserves, weight loss and sarcopenia.

Patients with malnutrition often have some of the highest morbidity and mortality rates. These patients also require long term stay in hospitals which leads to higher healthcare costs. In some cases, nutritional support during the hospital stay may help overcome these adverse morbidities. For this reason, many experts, agencies, and societies are recommending nutrition for malnourished patients admitted to hospitals.

There are many studies that show the benefit of nutritional support to frail and malnourished patients, as this can increase protein and energy levels; however, it has not always been shown to improve outcomes. There are other studies on providing nutrition to ill patients in hospitals that do not have same conclusion.

In this study, researchers aimed to answer the following question: "What is the association of nutritional support with clinical outcomes in medical inpatients who are malnourished or at nutritional risk?"

They conducted a systematic review and meta-analyses of 27 trials that included 6803 patients who received nutritional support during hospitalisation. The data were analysed by two reviewers. The primary outcome was mortality and the secondary outcomes included the length of hospital stay, hospital readmission, daily caloric and protein intake, functional outcome and weight change.

What they observed was that in general, when nutritional support was provided to patients who were malnourished or at nutritional risk during hospitalisation, it was associated with decreased mortality rates, fewer non-elective hospital readmissions, as well as weight increase and higher energy levels and protein intake.

Overall, the analysis showed that nutritional support should be provided to patients who are malnourished or at nutritional risk when they are admitted to the hospital as this can lead to better outcomes and fewer complications.