

Letter to the Editor**Nutrition Assessment in Elderly Surgical Patients – Need for Screening****Dear Editor,**

One third of surgical operations involve elderly patients, and one in two patients over 65 years will need surgery at some point in time in the remainder of their life. Surgery in geriatric patients is accompanied by an increase in morbidity and mortality. There is an increased risk of hospitalized elderly patients presenting with or developing, protein energy and other nutrient deficiencies in comparison to young adults. The nutritional assessment, management of nutrition deficiencies and diet of elderly hospitalized patients is generally neglected. Nutritional assessment using the available tools followed by dietary counseling and nutritional support are required for optimal metabolic and surgical care of this age group.

As a consequence of ageing there will be a likelihood of diseases, age related disorders and trauma that may require hospitalization medical and/or surgical interventions. The American College of Surgeons has developed comprehensive guidelines for care of geriatric surgical patients including an optimal preoperative assessment. The preoperative assessment of the geriatric surgical patients apart from a detailed history and examination is based on applying simple screening questionnaire tools and algorithms which focuses on cognitive ability, depression, risk factors for postoperative delirium, alcohol abuse, cardiac status assessment, identifying risk factors for postoperative pulmonary complications, functional physiological status and history of falls, a baseline frailty score, assessment of nutritional status and correction of severe nutritional deficiencies, a detailed medication history, patient's treatment goals and expectations, patient's family and social support systems and appropriate diagnostic tests.

Reviews of malnutrition in hospitalized geriatric patients suggest an alarmingly high rate of protein energy malnutrition in the range of 25% to 50% which can be associated with increased risk of surgical wound complications, infections, increased length of hospital stay and mortality rates. Even though some wasting and nutrient deficiencies may

commonly result from chronic diseases and cannot be easily reversed, most of the malnutrition in elderly can be reversed.

Nutritional assessment in the elderly is difficult and different from that performed in younger people. But assessment of the nourishment will help in predicting the complications and death in hospitalized elderly patients. There are no standards currently available for the assessment of malnutrition and related risk in the elderly. Although frequently used, hypoalbuminemia is an unreliable indicator of nutritional status because it may be more related to inflammation or hydration status than to malnutrition. There are many screening tools and anthropometric parameters available for assessment of the nutrition of the elderly including the Geriatric Nutritional Risk Index (GNRI), Mini Nutritional Assessment (MNA), Malnutrition Screening Tool (MST), Subjective Global Assessment System (SGA), Malnutrition Universal Screening Tool (MUST), Mini Nutritional Assessment-Short Form (MNA-SF), Body Mass Index (BMI), mid arm circumference, calf circumference and skin fold thickness. It is necessary to use simple reliable screening tools for assessment of nutrition of elderly patients. It should not rely too much on biological parameters like albumin or memory of the patient to assess the usual previous weight.

Unlike the other tools mentioned the Mini Nutritional Assessment (MNA) is a simple tool, which is well-validated and useful in clinical practice to measure nutritional status in elderly persons. It is based on 18 items including anthropometric and dietary parameters. An MNA score of ≥ 24 indicates good nutritional status. Scores of 17 to 23.5 identifies patients at risk for malnutrition and may require geriatric intervention including therapeutic dietary interventions or supplementation. A MNA score of < 17 indicates protein-energy malnutrition where assessment of plasma albumin, a diet history and record of food intake and measurement of anthropometry like weight, height, BMI, mid arm circumference and skin folds should be undertaken. A short screening version (MNA-SF) may be alternatively used in less than 4 minutes and if positive a

full MNA must be applied which takes around 15 minutes. The purpose of recommending a screening tool such as MNA is to screen for those who are already malnourished or at a risk of becoming malnourished after hospitalization. Those identified by screening should be subjected to detailed assessment of nutritional status and appropriate management.

The surgical related mortality is higher among the elderly patients compared to young adults. Comprehensive preoperative assessment including nutrition assessment and correction of deficiencies is necessary to achieve optimal surgical outcomes in elderly patients. Use of simple screening tools in nutrition assessment of hospitalized patients is necessary to achieve this goal.

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