Mini Nutritional Assessment (MNA): Research and Practice in the Elderly

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The Mini Nutritional Assessment (MNA)\textsuperscript{1} as Part of the Geriatric Assessment

The prevalence of malnutrition is high in elderly people in hospital, living in nursing homes, or involved in home care programs. Development of malnutrition in the elderly is usually a continuum, starting with inadequate food intakes, followed by changes in body composition and biochemical variables. Consequences of malnutrition often go unrecognized owing to lack of specific validated instruments to assess nutritional status in frail elderly persons. The Mini Nutritional Assessment (MNA) has recently been designed and validated [1–4] to provide a single, rapid assessment of nutritional status in the elderly. The MNA provides primary care physicians with a tool for rapid screening of patients who may subsequently need a more extensive nutritional assessment. For validation of the MNA we chose to evaluate the tool against the results of nutritional assessment performed by two physicians trained in nutrition, using comprehensive nutritional evaluation (including dietary intakes, anthropometry, and biochemical indices) [1–5]. The MNA was found to be highly correlated with each of these nutritional variables. The sum of the MNA score distinguishes elderly patients with adequate nutritional status (MNA $\geq 23.5$), protein-energy malnutrition (MNA $< 17$), and at risk of malnutrition (MNA between 17 and 23.5). With this scoring, sensitivity was found to be 96%, specificity 98%, and predictive value 97% [6]. The interobserver MNA score agreement was defined by Cohen’s kappa, with a $\kappa$ value $= 0.51$ (95% confidence interval 0.28–0.74) [7]. The MNA has been translated into several languages and is used in many clinics around the world. This book reports recent studies on nutrition in the elderly using the MNA and presented at the international meeting on the MNA at the Nestlé Research Center in Lausanne.

B. Vellas, P.J. Garry, Y. Guigoz

\textsuperscript{1} The Mini Nutrition Assessment (MNA) form is given in the Appendix.
References

Foreword

It has been known for many decades that even in the most affluent countries elderly people admitted to hospital for acute medical or surgical diseases or accidents usually undergo progressive impairment in their nutritional status [1, 2], which remains unnoticed for variable periods. When the medical staff diagnose protein-energy malnutrition, it is often late and may be difficult to correct.

Until 1994, only specialized units in the most advanced geriatric centers were using sophisticated measurements to assess malnutrition and to follow progress during realimentation [3, 4]. The criteria used in different centers were not always the same, making comparison between centers difficult. Moreover the techniques used were specialized and not applicable on a large scale in most geriatric centers, which do not have research personnel among their staff.

Since the beginning of the 1990s, Vellas, Garry, Guigoz and Albarède have developed and validated the Mini Nutritional Assessment (MNA) [5], which is easy, quick, and economical to perform and enables staff to check the nutritional status of elderly people when they enter hospitals or institutions, and to monitor changes occurring during their stay. This allows the necessary nutritional measures to be applied sooner, to prevent a further decline in nutritional status or to restore it to normality.

MNA also allows one to compare the prevalence of protein-energy malnutrition in various centers, and more importantly to compare nutritional measures and protocols used in these centers.

Nestlé Clinical Nutrition is very proud to have supported the development and evaluation of MNA for many years and to have been instrumental in promoting this new and indispensable tool for the better care of the elderly. The MNA Symposium will mark an important step in broadening the use of the MNA tool in its various applications.

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