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

Editors

Bruno Vellas, University of Toulouse, Toulouse, France
Philip J. Garry, University of New Mexico, Albuquerque, USA
Yves Guigoz, Nestlé Research Center, Lausanne, Switzerland
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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 ≥ 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 k 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 in the Nestlé Research Center in Lausanne.

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

1 The Mini Nutrition Assessment (MNA) form is given in the Appendix.
Preface

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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.

Pierre Guesry
Vice-President of Research
Nestlé Research Center,
Lausanne, Switzerland

Franck Arnaud-Battandier
Medical Director
Nestlé Clinical Nutrition,
Sèvres, France

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References

Contributors

Speakers

Franck Arnaud-Battandier
Nestlé Clinical Nutrition France
2, Rue Troyon
F–92316 Sèvres Cedex, France

Wm.C. Chumlea
Fels Professor
Wright State University
Department of Community Health and Pediatrics, School of Medicine
1005 Xenia Avenue
Yellow Springs, OH 45387-1695, USA

Robert Cohendy
Département d’Anesthésie-Réanimation
Hôpital Gaston-Doumengue
F–3000 Nîmes Cedex, France

Philip J. Garry
Department of Pathology
School of Medicine
University of New Mexico
2701 Frontier Place
N.E. Room 236
Albuquerque, NM 87131, USA

Martijn Griep
Academic Hospital
Vrije Universiteit Brussel (VUB)
Department of Geriatrics
Laarbeeklaan 101
B–1090 Brussels, Belgium

Pierre Guesry
Nestlé Research Center
Vers-chez-les-Blanc
PO Box 44
CH–1000 Lausanne 26, Switzerland

Yves Guigoz
Nestlé Research Center
Vers-chez-les-Blanc
PO Box 44
CH–1000 Lausanne 26, Switzerland

Douglas K. Miller
School of Medicine
Department of Internal Medicine
Division of Geriatric Medicine
St. Louis University – Health Sciences Center
1402 S. Grand Blvd., Rm M238
St. Louis, MO 63104, USA

John E. Morley
School of Medicine
Department of Internal Medicine
Division of Geriatric Medicine
St. Louis University – Health Sciences Center
1402 S. Grand Blvd., Rm M238
St. Louis, MO 63104, USA
Contributors

Peter Oster  
Bethanien Krankenhaus  
Geriatrisches Zentrum GmbH  
Rohrbachstrasse 149  
D–69024 Heidelberg, Germany

Pierluigi Quadri  
Ospedale Regionale della Beata Vergine  
Via Turconi 23  
CH–6850 Mendrisio, Switzerland

Laurence Z. Rubenstein  
Director, Geriatric Research Education and Clinical Center (GRECC)  
UCLA School of Medicine  
VAMC Sepulveda (11E)  
16111 Plummer Street  
Sepulveda, CA 91343, USA

Antonio Salva I Casanovas  
PASS Centre Geriatric Cabanelles  
UFISS de Geriatria i Unitat de Convalescencia  
RDA Alfonso X, 49-73  
E–08304 Mataro (Barcelona), Spain

Kristel Scheirlinckx  
Service de gériatrie  
Clinique Universitaire de Mont-Godinne  
B–5530 Yvoir, Belgium

Eduardo Schiffrin  
Nestlé Research Center  
Vers-chez-les-Blanc  
PO Box 44  
CH–1000 Lausanne 26, Switzerland

Bruno Vellas  
Service de Médecine Interne et Gérontologique Clinique  
Hôpitaux de Toulouse  
170, Av. de Casselardit  
F–31300 Toulouse, France

Gilbert Zulian  
C E S C O  
Centre de Soins continus  
Chemin de la Savonnière 11  
CH–1245 Collonge-Bellerive, Switzerland

Invited Attendees

Giorgetta Cappa / Italy  
Tommy Cederholm / Sweden  
Jadwiga Charzewska / Poland  
Lisette De Groot / Holland  
Dolf De Ridder / Belgium  
Hedi Decrey / Switzerland  
Laura Del Corso / Italy  
Lorenzo D. Donini / Italy  
Tamas Fülop Jr. / Canada  
C. Gazzotti / Belgium  
R. Gonthier / France  
Robledo L. Gutierrez / Mexico  
E. Joosten / Belgium  
Vladimir Kh. Khavinson / Russia  
Stefan Krajcik / Slovakia  
Roman Lutynski / Poland  
Yoram Maaravi / Israel  
Irena M. Rea / N. Ireland  
Michel Roulet / Switzerland  
Taisa Semesko / Ukraine  
Lumila Sineok / Ukraine  
Slavica Suzic / Yugoslavia  
Orien L. Tulp / USA  
Raivo Vokk / Estonia  
Paul Wiesel / Switzerland  
Ulla Wissing / Sweden