

More to look into the nutrition of elderly diabetic patients

Abstract

Elderly diabetic patients may be at risk of malnutrition, independent of their Body Mass Index. That is a serious problem that has been neglected and that may contribute to worse outcomes in a growing population of older type 2 diabetic patients.

Keywords: diabetes, undernutrition, elderly

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Abbreviations: BMI, body mass index; MNA®-SF, mini nutritional assessment-short form

Editorial

International guidelines for diabetes recognize the pivotal role of nutrition therapy in overall diabetes management in order to improve health and prevent complications, given accumulating evidence that even modest weight reduction can improve glycemic control.^{1,2}

However, the metabolic abnormalities and health issues that are caused by obesity in young and middle aged people may have a different impact in older people. In a study that analyzed data from the Third National Health and Nutrition Examination Survey (1988-1994), Body Mass Index (BMI) was strongly associated with increased relative risk of cardiovascular disease, dyslipidemia, type 2 diabetes and hypertension in the young and middle aged, but this association was attenuated in old and very old populations.³

In a preliminary investigation of the nutritional status and its relationship with functional status in older citizens with diabetes mellitus, Turnbull and Sinclair found that community-dwelling elderly subjects with diabetes may be at risk of malnutrition when compared with non-diabetics. Those in the diabetic group also had significantly lower albumin scores when compared with the control group and there is probably a causal relationship between malnutrition and functional decline in this group.⁴

In an observational multicenter study conducted in 35 Spanish hospitals with 1,090 subjects (78±7.1 years; 50% males), 39.1% had risk of malnutrition and 21.2% had malnutrition. This high prevalence of malnutrition among elderly in patients with diabetes was observed regardless of BMI. Malnutrition, albumin, and Mini Nutritional Assessment score were related to length of stay, mortality and home discharge.⁵

There are very simple, fast and cheap screening tools to evaluate the nutritional status, a serious problem that may affect a high percentage of diabetic patients.⁶

We conducted a descriptive cross-sectional study in Brazil with 100 participants (50 Type II Diabetic outpatients and 50 nondiabetic) aged 60 to 65 years matched for age and sex, by using the Mini Nutritional Assessment-Short Form, (MNA®-SF).⁷ The diabetic group had a higher percentage of patients with malnutrition or risk of malnutrition

(58.0%) when compared to the non-diabetic group (22.0%). The chance of a patient being malnourished or at risk for nutrition is substantially higher with decreased food intake, psychological stress or acute disease and neuropsychological problem. The BMI of the patients had no statistically significant relationship with changes in nutritional status.

In summary, the few studies that we found in the literature and our observations suggest that elderly diabetic patients may be at risk of malnutrition, independent of their Body Mass Index, a serious problem that has been neglected and that may contribute to worse outcomes in a growing population of older type 2 diabetic patients.

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Conflict of interest

Author declares that there is no conflict of interest.

References

1. Evert AB, Boucher JL, Cypress M, et al. Nutrition Therapy Recommendations for the Management of Adults With Diabetes. *Diabetes Care*. 2014;37(Supplement 1):S120–S143.
2. Canadian Diabetes Association Clinical Practice Guidelines Expert Committee, Dworatzek PD, Arcudi K, et al. Nutrition Therapy. *Can J Diabetes*. 2013;37(Suppl 1):S45–S55.
3. Canning KL, Brown RE, Jamnik VK, et al. Relationship between obesity and obesity-related morbidities weakens with aging. *J Gerontol A Biol Sci Med Sci*. 2014;69(1):87–92.
4. Turnbull PJ, Sinclair AJ. Evaluation of nutritional status and its relationship with functional status in older citizens with diabetes mellitus using the mini nutritional assessment (MNA) tool—a preliminary investigation. *J Nutr Health Aging*. 2002;6(3):185–189.
5. Paris SA, Garcia JM, Gomez-Candela C, et al. Malnutrition prevalence in hospitalized elderly diabetic patients. *Nutr Hosp*. 2013;28(3):592–599.
6. Skipper A, Ferguson M, Thompson K, et al. Nutrition screening tools: an analysis of the evidence. *JPEN J Parenter Enteral Nutr*. 2012;36(3):292–298.
7. Rubenstein LZ, Harker JO, Salva A, et al. Screening for undernutrition in geriatric practice: developing the short-form mini-nutritional assessment (MNA-SF). *J Gerontol A Biol Sci Med Sci*. 2001;56(6):M366–M372.