Nutritional status of frail elderly

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ABSTRACT

Introduction: Growing population of elderly requires effective medical diagnostics and help. Criteria developed by Fried et al. are most often used for the diagnosis of the frailty syndrome. An inherent element of frailty syndrome is malnutrition. Malnutrition results from inadequate food supply, coexistence of acute and chronic diseases. Effective nutritional interventions conducted on frail older persons can prevent them from developing the frailty syndrome.

Review: The prevalence of frailty in elders is 17% moreover 42.3% are prefrail. There are many scales designed to identify frailty syndrome, but the most common is the classification of Fried et al. Malnutrition is a common state in frail elderly. Basic questionnaire, which is used to diagnose malnutrition, is MNA (Mini-Nutritional Assessment). Mini-Nutritional Assessment Short-Form (MNA-SF) and Malnutrition Universal Screening Tool (MUST) also can be used.

Sarcopenia, which is defined as reduced muscle mass and strength and impaired muscle performance, significantly contribute to the development of frailty. Many studies have shown that an effective method in the preventing of sarcopenia is protein supplementation. Other beneficial lifestyle and diet changes, which can help prevent the development of frailty syndrome, are adherence to the Mediterranean diet, appropriate intake of carotenoids, vitamin E, selenium and zinc. Another important protective factor is vitamin D levels. Low serum 25(OH)D is strongly associated with frailty.

Conclusions: From a nutritional point of view adherence to a Mediterranean-style diet, sufficient intake of protein, micronutrients and vitamin D, as well as regular moderate physical activity, can be crucial in the preventing of the frailty syndrome.

Keywords: Frail elderly, nutritional status, diet, malnutrition, vitamin D

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