MANAGEMENT UPDATE ON FUNCTIONAL DECLINE IN OLDER ADULTS 2012

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This issue of The Singapore Family Physician contains an update of the articles in the Vol 37 No.2 (Supplement) April-June 2011 issue. Thanks are due to the Health Promotion Board for jointly organising and for sponsoring this course again. In the units of reading, the references have been updated and keywords are included. The units on vision and oral health have been updated. The ten readings are new and so are the MCQs. The Health Promotion Board is also publishing a set of e-learning case studies on its website for doctors to further consolidate the application of knowledge in functional decline.

Functional decline may be defined as the decline in the ability to perform activities of daily living namely, bathing, dressing, toileting, transfer, continence and feeding. With increasing age, this ability is eroded by degenerative processes linked to ageing per se, superimposed by incident disabilities accumulating during the course of life. Apart from disease, cognitive impairment and age-related muscular dysfunction are the key threats to independent lifestyle at older ages (Cederholm et al, 2011).

A study of 103 patients in a nursing home in Singapore, published in 2006, described the risk factors of functional decline. The significant risk factors noted were age and dementia. The majority of decline (78%) was due to progression of chronic illnesses, most commonly dementia (15 out of 36), both dementia and stroke (14%) and acute stroke (8%) (Ang et al, 2006).

How are frailty, sarcopenia, and functional decline linked? Frailty is a common condition in older persons and has been described as a geriatric syndrome resulting from age-related cumulative declines across multiple physiological systems, with impaired homeostatic reserve and a reduced capacity of the organism to resist stress. Therefore frailty is considered a state of high vulnerability for adverse health outcomes, such as disability, falls, hospitalisation, institutionalisation, and mortality (Landi F et al, 2010). Sarcopenia is age-related muscle loss and contributes to frailty (Cooper C et al, 2012).

A variety of interventions can be undertaken to prevent, delay, or offset the process of functional decline. Primary prevention is designed to contain decline through individual or collective efforts focused on the individual (e.g. physical activities and nutrition) or his or her material and social resources. Secondary prevention involves screening those at risk for functional decline to allow earlier intervention, before the decline starts. This can be opportunistic. It can also be community based. For example, those who do not exercise regularly will be at risk and are encouraged to be active. Geriatric assessment and rehabilitation service act at the tertiary level by reducing the consequences of functional decline. These geriatric interventions focus on the correction of impairments, rehabilitation for the disabilities and mobilisation of social and material resources (Herbert, 1997).

Regular physical activity has been shown to protect against diverse components of the frailty syndrome in men and women of all ages and frailty is not a contraindication to physical activity, rather it may be one of the most important reasons to prescribe physical exercise (Landi F et al, 2010).

The objective of this skill course is to improve the management of functional decline in older adults. The topics of physical function, mood, continence, hearing, vision, and oral health in relation to functional decline in the elderly are examined from the perspectives of assessment, interpreting of results, clinical evaluation, management, clinical pathway, and referral.

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