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Dysphagic Patients and their Association with Protein-Malnutrition and Sarcopenia

Speaker biography

Prof. Hidetaka Wakabayashi is affiliated to Department of Rehabilitation Medicine at the Tokyo Women's Medical University Hospital where he is currently working as Professor.

He received his medical education and M.D. from Yokohama City University in 1995. After his residency of internal medicine at Japanese Red Cross Medical Center, he began specializing in rehabilitation at Yokohama City University Hospital, and continued practice and researches at Yokohama Rehabilitation Center, and Yokohama Stroke and Brain Center. He was the medical director of the Department of Rehabilitation Medicine at Saiseikai Yokohama City South Hospital from 2003 to 2008 and worked at Yokohama City University Medical Center from 2008 to 2020.

He is director and editorial board of the Japanese Association on Sarcopenia and Frailty, board member of the Society on Sarcopenia, Cachexia and Wasting Disorders and associate editor of the Journal of Cachexia, Sarcopenia and Muscle, and Chairperson and Editorial Board of the Japanese Association of Rehabilitation Nutrition.

Dr. Hidetaka Wakabayashi has authored and co-authored several national and international publications and also working as a reviewer for reputed professional journals. His research interests include dysphagia rehabilitation, clinical nutrition, sarcopenia, sarcopenic dysphagia, and deconditioning.

Dr. Hidetaka Wakabayashi is Director of the Japan Association of Rehabilitation Hospital and Institution and he is having an active association with different societies and academies around the world.

Dr. Hidetaka Wakabayashi made his mark in the scientific community with the contributions and widely recognition from honourable subject experts around the world.

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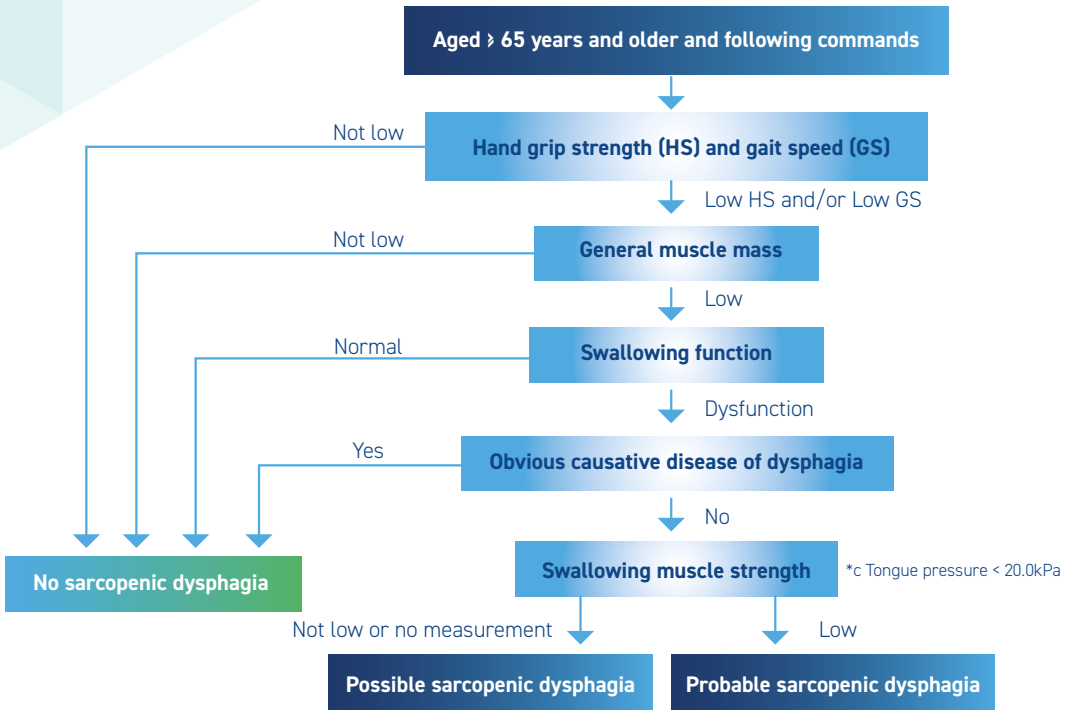
Abstract

Dysphagia, malnutrition, and sarcopenia are closely related. Dysphagia increases the risk and severity of protein-energy malnutrition. Moreover, protein-energy malnutrition may increase the risk and severity of dysphagia. Furthermore, Malnutrition risk and sarcopenia are common in patients with oropharyngeal dysphagia. In patients with oropharyngeal dysphagia with chronic conditions, the prevalence of malnutrition risk was 51.1% and sarcopenia was 16.7%. In patients with oropharyngeal dysphagia with community-acquired pneumonia, the prevalence of malnutrition risk was 69.5% and Sarcopenia was 29.4%.

Sarcopenic dysphagia is defined as difficulty of swallowing due to sarcopenia of the swallowing and generalized skeletal muscles. The presence of dysphagia and whole-body sarcopenia are necessary to diagnose sarcopenic dysphagia. Diagnostic algorithm for sarcopenic dysphagia was the most widely used and should be used, because it is the only reliable and validated diagnostic method. Figure 1. The prevalence of sarcopenic dysphagia in acute care hospital required dysphagia rehabilitation, and pneumonia inpatients with dysphagia was 32% and 81%, respectively. Therefore, sarcopenic dysphagia is quite common in Japan.

Figure 1: Diagnostic algorithm for sarcopenic dysphagia



Mori T, et al, JCSM Clinical Reports, 2017

In 2019, the Japanese Society of Dysphagia Rehabilitation, the Japanese Association of Rehabilitation Nutrition, the Japanese Association on Sarcopenia and Frailty, and the Society of Swallowing and Dysphagia of Japan published a position paper about sarcopenia and dysphagia. Dysphagia rehabilitation along with nutritional support consisting of approximately 35 kcal/kg/day determined using their ideal bodyweight is recommended in the position paper. Our study showed that providing ⩾ 30 kcal/kg/day energy based on ideal body weight (IBW) improved swallowing function more compared with providing < 30 kcal/kg/day energy in patients with sarcopenic dysphagia.

Iatrogenic sarcopenia is defined as sarcopenia caused by the activities of medical doctors, nurses, or other health care professionals in health care facilities, especially in acute care hospitals. There are 3 causes of Iatrogenic sarcopenia. 1) Unnecessary inactivity or unnecessary oral intake restriction. 2) Inappropriate nutritional care management. 3) Iatrogenic diseases and adverse drug events. Nutritional Management in nil per os (NPO) patients with aspiration pneumonia was inappropriate. NPO patients on Day 7 were 35% in Japanese database study. Moreover, only 5.3% of NPO patients were prescribed the recommended doses of ⩾20 kcal/kg/day. Some acute care hospitals in Japan may be sarcopenia manufacturing factories due to iatrogenic sarcopenia. Iatrogenic sarcopenia can have an important role in the close relationship among dysphagia, malnutrition, and sarcopenia.

Rehabilitation nutrition is a combination of both rehabilitation and nutrition care management. High quality rehabilitation nutrition is provided by a rehabilitation nutrition care process. Rehabilitation nutrition care process includes assessment and diagnostic reasoning, diagnosis, goal setting, intervention, and monitoring. It is important to turn this cycle several times. Goal should be set SMART. SMART means a goal that is specific, measurable, achievable, relevant, and time-bound. For example, nutrition improvement is not a SMART goal. Increase 1kg body weight in 1 month is a SMART goal. Aggressive nutrition therapy is important to treat sarcopenic dysphagia. Energy requirement in people with sarcopenic dysphagia is energy expenditure plus energy accumulation. Without energy accumulation, body weight is not increased. Energy accumulation is usually 200-750 kcal/day.

References

- Fujishima I, et al (2019) Sarcopenia and dysphagia: Position paper by four professional organizations. Geriatr Gerontol Int 19:91-97
- Nagano A, Nishioka S, Wakabayashi H (2019) Rehabilitation Nutrition for Iatrogenic Sarcopenia and Sarcopenic Dysphagia. J Nutr Health Aging 23:256-265
- Maeda K, et al (2021) Nutritional management in inpatients with aspiration pneumonia: a cohort medical claims database study. Arch Gerontol Geriatr 95:104398
- Wakabayashi H, et al (2021) Diagnosis and Treatment of Sarcopenic Dysphagia: A Scoping Review. Dysphagia 36:523-531
- Mizuno S, Wakabayashi H, Wada F (2021) Rehabilitation nutrition for individuals with frailty, disability, sarcopenic dysphagia, or sarcopenic respiratory disability. Curr Opin Clin Nutr Metab Care. doi: 10.1097/MCO.0000000000000787.

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Watch the 25 minute conference talk with Dr. Hidetaka Wakabayashi and hear about THE CONCEPT AND DEFINITION OF DYSPHAGIA DUE TO SARCOPENIA, AND HOW SWALLOWING MUSCLES ARE INEVITABLY AFFECTED BY MALNUTRITION

https://youtu.be/1CCs9DOBhYI

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