

# A Case Report of Senile Sarcopenia Treated by Nutritional Intervention Combined with Resistance Exercise

**Mo Zhou**\*

Department of Health Care, China-Japan Friendship Hospital, Beijing, China

## Email address:

zhoumodmv@163.com (Mo Zhou)

\*Corresponding author

## Abstract

*Background* Sarcopenia, a prevalent condition in the elderly, imposes significant burdens on patients and society, with no effective drug treatments currently available. We present this case of sarcopenia aiming to offer treatment suggestions to enhance the quality of life for similar patients. *Case presentation* A 90-year-old female, admitted for fatigue and weight loss over the past year, with a history of hypertension, hyperlipidemia, and bilateral knee replacement. Baseline evaluation: Body Mass Index (BMI) 23.5kg/m<sup>2</sup>, Dual-energy X-ray Absorptiometry (DXA) 5.33 kg/m<sup>2</sup>, grip strength 14.2kg, 6-meter walking speed 0.68m/s, 5-time chair stand test 13.9s, Short Physical Performance Battery (SPPB) 8 points and Activities of daily living (ADL) 65 points. Combined with the evaluation of muscle mass, grip strength and physical function, severe sarcopenia could be diagnosed clearly. After 8 weeks of combined nutrition intervention and resistance strength training, the patient's self-reported fatigue symptoms improved, and the relevant indexes were re-evaluated: BMI 23.8kg/m<sup>2</sup>, DXA 5.35 kg/m<sup>2</sup>, grip strength 15.2kg, 6-meter walking speed 0.75m/s, 5-time chair stand test 12.5s, SPPB 10 points and ADL 75 points. *Conclusion* Combining nutritional intervention with resistance exercise is anticipated to enhance muscle quality, strength, and function in elderly sarcopenia patients, thereby improving their quality of life.

## Keywords

Sarcopenia, Nutritional Intervention, Resistance Exercise