Examination focusing on intestinal microbiota composition of patients with sarcopenia

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Sarcopenia is defined as a decrease in muscle mass with aging, which causes a decrease in physical function, high risk of falls, and bedridden state, resulting in a decrease in QOL and an increase in medical and caring burden. On the other hand, as the prevalence of constipation increases in the elderly, the intestinal environment is presumed to deteriorate. However, the relationship between intestinal environment and sarcopenia is to be elucidated. The aim of current study is to clarify the relationship between sarcopenia and intestinal environment in humans.

We examined and analyzed dietary habits (BDHQ), body composition, exercise habits, past history, intestinal microflora-constituting bacteria, etc. for 42 subjects over 65 years old. In the sarcopenia group (n = 8), body weight, limb skeletal muscle mass, ingested nutrient content and the like tended to be low. For intestinal bacterial flora, the ratio of Firmicutes / Bacteroidetes was significantly reduced in the sarcopenia group.

Accordingly, it is suggested that maintenance of physical function, improvement of the quality of meal, and amelioration of the gut microbiota may be necessary to prevent sarcopenia.