Activities of daily living of patients with cancer

Daisuke Sato

Department of Rehabilitation Sciences, Chiba Prefectual University of Health Sciences, Japan

Physical dysfunction is a frequent consequence of cancer and its treatments. Improvement of physical function therefore should be a primary goal of treatment; the use of appropriate assessment and outcome measures is fundamental. The purposes of this study were to investigate the psychometric properties of a Japanese language version of Physical Performance Test (PPT) Battery and characterize physical function in patients with cancer referred for rehabilitation.

A total of 105 patients with cancer participated in this study. All patients had a diagnosis of cancer. The subjects completed the Japanese language version of the PPT Battery: the time taken to complete various tasks, the distance walked in 6 minutes, and the distance reached forward while standing were measured. Two self-report questionnaires, one on sensory evaluation of pain and the other on affective evaluation of pain; the Functional Independence Measure (FIM), which evaluates activities of daily living; and Brief Fatigue Inventory (BFI) and European Organization for Research and Treatment of Cancer Quality of Life Questionnaire were simultaneously administered to the subjects. This study was approved by the ethical committee of our institution, and informed consent was obtained from all participants.

The results for reliability showed that the ICC values for inter-rater reliability and intra-rater reliability were 0.89 or more for every item. The results for validity showed significant associations between the scores for all of the items in the Japanese language version of the PPT Battery and total scores for the FIM and BFI.

Significant associations were found between scores for the Japanese language version of the PPT Battery and pain. Pain has a substantial impact of physical performance of patients with cancer. Fatigue also impacts physical performance. Compromised ability to perform certain physical tasks affects quality of life. Further investigation of the roles of these relevant variables is needed. I wish to assess the mid- to long-term efficacy of intervention by a rehabilitation approach that includes improvement of the affective state due to the pain rather than an approach whose only purpose is to alleviate the pain itself. The results also suggested that it might be possible to improve the activity limitations of patients with chronic pain by improving their affective state in response to the pain. This research was supported by Grant-in-Aid for Young Scientists B.