## Successful physical therapy to enhance self-efficacy and expand the range of activity - A case of Parkinson's disease -

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## Abstract

This paper reports a female patient with Parkinson's disease in her mid-seventies, who had been energetic and actively participated in society until the experience of a fall decreased her self-efficacy and narrowed her range of activity. With the outpatient rehabilitation goal of improving her physical functions and expanding her range of activity, exercise therapy and other intervention approaches to enhance her self-efficacy and promote her behavioral change were provided. Through these approaches, the patient's physical functions improved, with reduced fear of falling and her self-efficacy enhanced. Her range of daily activities also expanded, consequently enabling her to resume social participation. Tottori J. Clin. Res. 9(2), 126-130, 2017

Key words: Parkinson's disease (PD), falls, outpatient rehabilitation, social withdrawal, self-efficacy.

## Introduction

In Parkinson's disease (PD), falls are a cause of ADL limitations. They also lead to physical dysfunction, reduce the frequency of going out, and narrow the range of activity. Fear of falling is another problem, which increases the risk of social withdrawal due to decreased self-efficacy<sup>1)</sup>.

Outpatient rehabilitation is effective to improve PD patients' physical functions. However, intervention based only on exercise, such as muscle training, has been reported to be insufficient to improve their activities of daily living (ADL) and quality of life (QOL)<sup>2</sup>, although their physical functions such as lower limb muscle strength, walking ability, and other motor functions improve to some extent.

This paper reports a female patient with PD in her mid-seventies, who had been energetic and actively participated in society until the experience of a fall decreased her self-efficacy and narrowed her own range of activity. With the outpatient rehabilitation goal of improving her physical functions and expanding her range of

activity, exercise therapy and other intervention approaches to enhance her self-efficacy and promote her behavioral change were provided. Through these approaches, the patient's range of daily activities expanded, consequently enabling her to resume social participation

## **Patient**

Age: Mid-seventies.

Sex: Female.

Chief complaint: Walking difficulty.

Past medical history: The patient had experienced a compression fracture of the second lumbar vertebrae 1 year previously.

Present medical history: PD symptoms, such as resting tremor, muscle rigidity, a tendency to bend or flex forward, and gait disturbance, had begun to appear 2 years previously. Stumbling on a rice bag placed at the side of the entrance hall, she fell backward. This experience had decreased her frequency to go out. She had been treated with anti-PD drugs in our facility for 1 year. To improve her walking ability, outpatient rehabilitation had started.