Physical Activity in Peritoneal Dialysis Patients

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Purpose: The purpose of this study was to investigate physical activity (PA) in peritoneal dialysis (PD) patients.

Methods: The study population comprised 30 PD outpatients. Their PA was evaluated using an accelerometer and is expressed as the number of steps taken per day, average PA time in min/day, and activity-related energy expenditure (EE) in kcal/day. The intensity of PA was classified according to three PA levels: Light (< 3 METs), Moderate (3–6 METs), and Vigorous (> 6 METs), and PA times at these three PA levels were compared. Patients were further divided into four groups according to number of steps taken per day as < 5,000 (group A), 5,000–7,499 (group B), 7,500–9,999 (group C), and ≥ 10,000 (group D), and the number of patients were compared among the four groups.

Results: The mean values of PA included number of steps: 4,864.3 ± 3,365.7 steps/day; PA time: 53.6 ± 34.4 min/day; and activity-related EE: 135.6 ± 122.2 kcal/day. PA time according to PA level was Light: 37.0 min/day; Moderate: 10.6 min/day; Vigorous: 1.8 min/day. The number of patients in group A (n=18) was significantly higher than that of groups B (n=7), C (n=3), and D (n=2) (p< 0.01).

Conclusions: Most PD patients were classified as performing low PA (number of steps per day < 5,000) at a Light PA level (< 3 METs).