Flex Therapist CEUs

Parkinson's Disease: Postural Instability Interventions

The effectiveness of physiotherapy treatment on balance dysfunction and postural instability in persons with Parkinson’s disease: a systematic review and meta-analysis

1. Parkinson’s disease is the most common neurological disease in the world that affects neurophysiologic function, movement abilities, and quality of life.

A. True
B. False

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2. Which of the following is the common incapacitating symptom of PD?

A. Balance dysfunction
B. Increased frequency of falls and injuries
C. Increased comorbidities
D. Loss of equilibrium

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3. Although patients with PD get the best available medications, they still experience a decline of body function, daily activities, participation and weakening in mobility.

A. True
B. False

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4. This systematic review showed that _____ will help to improve range of motion, endurance, gait parameters, functional reaching activities and postural stability in particular and balance at large.

A. Resistance training
B. Active joint mobilization
C. Incremental speed-dependent treadmill training
D. Exercises of self-destabilization

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5. This review found weak evidence that freely coordinated resistance training might be more effective than balance training for improving postural control and balance in people with PD.

A. True
B. False

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6. Which of the following has been found to significantly reduce the number of fallers at post 3 months, 6 months, and 12 months, and has also been shown to deliver a lower fall rate compared to the control group?

A. Resistance training
B. Technology assisted balance and gait training
C. Active joint mobilization
D. Incremental speed-dependent treadmill training

Effects of a sensory-motor orthotic on postural instability rehabilitation in Parkinson's disease: a pilot study

7. It is well-known that postural control in PD patients mainly relies on:

A. Visual information
B. Executive function
C. Muscle control
D. Selective attention

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8. It has been demonstrated that _____ stimulation has an influence on muscular tone with increased voluntary activation and improved muscle velocity and strength.

A. Muscle
B. Joint
C. Ligament
D. Tendon

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9. Which of the following activates the peroneal, abductor, and paraspinal muscles?

A. The medial spot
B. The lateral spot
C. The metatarsal spot
D. The under digit spot

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10. An increase of sway area values, obtained during the instrumental functional reaching test, and an improvement of the Romberg index were seen in the:

A. Control group immediately after the training
B. Control group at the follow-up evaluation
C. Experimental group immediately after the training
D. All of the above were shown to have an increase of sway area values and an improvement of the Romberg index

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11. Anticipatory postural adjustments and reactive postural reactions in PD are compromised, in the sense that they are reduced in:

A. Amplitude
B. Velocity
C. Both amplitude and velocity
D. Neither amplitude nor velocity

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12. Significant changes in the posturographic data during the FRT in the experimental group were seen only when the patients were required to execute the test:

A. While standing
B. With their non-dominant arm
C. With the elevated arm at shoulder's height
D. With their eyes closed

Effects of a balance-based exergaming intervention using the Kinect sensor on posture stability in individuals with Parkinson's disease: a single-blinded randomized controlled trial

13. Positive effects of exergaming on balance, functional abilities and activities of daily living were found:

A. Within groups
B. Between groups when compared to the control group
C. Both within and between group differences were found
D. No positive effects of exergaming were found

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14. This study showed that balance-based exergaming training had a greater effect on postural stability compared with conventional balance training.

A. True
B. False

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15. The findings suggest that exercises containing _____ component were most beneficial in improving postural stability in people with PD.

A. A resistance
B. A flexibility
C. An endurance
D. A balance

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16. The findings of this study revealed that balance-based exergaming training produced particularly strong effects on directional control in:

A. Limits of stability
B. One-leg stance
C. Timed up and go
D. Berg Balance Scale

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17. Which component of LOS remained unchanged after exergaming training?

A. Reaction time
B. Movement velocity
C. Endpoint excursion
D. Directional control

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18. The current results revealed better OLS performance in the eyes-open condition after exergaming training.

A. True
B. False

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19. All of the following are important characteristics of interventions in PD, except for:

A. Being task-specific
B. Being progressive
C. Lower challenge level
D. Variable in terms of practice

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20. The significant changes in BBS and TUG performance observed after the exergaming and conventional balance training both reached detectable changes in patients with PD. (26)

A. True
B. False

Immediate effects of physical therapy on postural instability and frontal lobe dysfunction, as indicated by Frontal Assessment Battery score, in Parkinson’s disease

21. Which of the following is due to the loss of postural reflexes?

A. Gait disturbances
B. Postural instability

C. Both gait disturbances and postural instability
D. Neither gait disturbances nor postural instability

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22. Although not common in the early stages of the disease, gait disturbances is one of the most common factors that cause distress in the later stages.

A. True
B. False

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23. As PD progresses, various complex non-motor symptoms tend to occur more often, among them, _____ dysfunction, which is associated with motor learning and executive disorder, modifies the motor symptoms.

A. Broca's area
B. Occipital lobe
C. Wernicke's area
D. Frontal lobe

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24. The physical therapy sessions of this study consisted of which intervention activity reported to be effective for PI improvement?

A. Stretching exercises
B. Balance training
C. Gait training
D. Stretching, balance, and gait training are all reported to be effective for PI improvement and therefore were included as part of the intervention activities

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25. The FAB high-score group showed which of the following immediate improvements in trunk movement?

A. Decreased changes in total displacement of the COG and in total AP displacement
B. Minimum AP displacement
C. Maximum anterior speed of the C7 marker
D. The FAB high-score group showed all of the above as immediate improvements in trunk movement

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26. The FAB low-score group showed significantly lower scores in which domain?

A. Inhibitory control
B. Environmental autonomy
C. Both inhibitory control and environmental autonomy
D. Neither inhibitory control nor environmental autonomy

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27. The findings of this study suggest that FAB scores could be useful for predicting which PD patients would be more likely to show the immediate effects of PT on PI.

A. True
B. False
