Effects of action observation therapy for gait training in stroke: a scoping review

ABSTRACT

Action observation therapy (AOT) is a rehabilitation approach integrating sensory perception of motor skills among stroke survivors. This review article aims to investigate the effectiveness of AOT for gait training among comparative studies in stroke rehabilitation. We searched through MEDLINE, Scopus, and Google Scholar using the following subsets of terms: 'stroke' AND 'gait' AND 'action observation.' Randomised controlled trials (RCTs) and non-RCT studies focusing on AOT for gait training in stroke patients were included. Eleven RCTs and one nonRCT study met the inclusion criteria and were included for analysis. Data were extracted on sample size, inclusion criteria, type of intervention, functional outcome measures, gait parameters, and intervention effectiveness. Overall, AOT demonstrated positive results as an adjunctive intervention for improving gait properties among stroke individuals. The review highlighted its neurophysiological mechanisms and benefits in stroke rehabilitation. AOT shows promise as a beneficial adjunctive intervention for improving gait properties among stroke individuals. Further research is warranted to explore its optimal implementation and long-term effects in stroke rehabilitation.