



Postural hypotension among patients with cerebral stroke and its relevance to Physiotherapy: A scoping review.

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ABSTRACT:

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Introduction: Issues of postural hypotension (Fall of SBP by 20 mm of Hg & DBP by 10 mm of Hg) are relatively common among the patients with cerebral stroke especially in the early stages. Postural hypotension may hinder the overall process as it may create anxiety, fear eventually may delay the recovery & so the progression. It may lead to inevitable comorbidities such as bed sore, muscle weakness & autonomic dysfunctions. Physiotherapists, as an important team member may be involved in short term (prevention of bed sore, prevention of DVT, training patient to sit upright, bed mobility etc) and long-term goals (mobility & gait training etc.). This scoping review is an attempt to put light on postural hypotension among patients with cerebral stroke and available pertinent, may be feasible physiotherapy interventions.

Method: A pub-med search has been made in July 2021 for a period of past ten years (2011-2021). No specific text availability has been applied. Key term such as (physiotherapy, postural hypotension, cerebral stroke) with best match (MeSH Terms) search information has been used. No additional filters have been opted. We have identified & analyzed free available text & corroborated works of relevance.

Conclusion: Corroborated studies have assessed patients in early stage in hospital settings and some even after discharge. Few have assessed changes in BP, FIM, Fugl-Meyer assessment scale, motor function, functional independence, postural control, walking ability, orthostatic tolerance and few have also discussed, focused history, physical examination, electrocardiogram, and tailored diagnostic testing. Various treatment methods such as breathing exercises, verticalization by tilt table, functional, postural treatment, selective massage, neuromuscular electrical stimulation, Erigo, with functional electric stimulation and passive leg movements, functional standing program, task specific training as repeated sit to stand. Findings related to early mobilization (within and after 24-hour post - stroke) have also been substantially viewed. Tilt Testing and Carotid Sinus Massage have also been discussed in related studies. PH may not only impact rehabilitation but may cause fall and associated injuries that may incur further cost on health care system. Our search was also limited to one search engine and this gap of knowledge should be investigated further on various data bases. Various physiotherapy interventions have shown benefits in few studies but to define a proper protocol & statement with regarding cerebral stroke, its type and stages needs further investigation and studies.

Key terms: physiotherapy, postural hypotension, cerebral stroke