# Evaluation of balance and gait between right and left sided hemiplegic patients followed by rehabilitation at CRP

By

**Suraj Khanal**



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Bangladesh Health Professions Institute (BHPI) Faculty of Medicine

**University of Dhaka**

## ABSTRACT

**Background**: Stroke has been the main cause of death in the world. Fall injuries are very common in the individual with the strokes. For the fall injuries for the patient with stroke the balance and gait dysfunctions are associated. Left hemiparetic patient exhibit poorer postural balance in sitting and standing positions compared to right hemiparetic patients.

**Objectives:** The objective of this study was to evaluate the changes of balance and gait in comparison of left hemiplegia with right hemiplegia after the rehabilitation as well as to find out the association between the balance and gait outcomes in left stroke and right stroke.

**Methodology**: Pre and post- test study was carried out. 15 right stroke patients and 15 left stroke patients were taken as sample for the study. Berg Balance Scale and Dynamic Gait Index was used to measure the balance and gait of all the samples before and after the 10 settings of treatment in CRP.

**Results**: The age of the subjects that were recruited in the present study were between 30 to 60 years. The mean age of the total subject was 47.7. There was no significance difference between the pre and post score of balance and gait in between the right stroke and left stroke cases ($p>0.05$). There was significant intermediate correlation between the Pre-Balance Score and Pre-Gait scores among right hemiplegic patients. ($r=0.62$, $p=0.02$). As well as there was significant intermediate correlation between the post-Balance Score and Post Gait Score ($r=0.53$. $p=0.009$). There was significant intermediate correlation between the Pre-Balance Score and Pre-Gait scores among left hemiplegic patients. ($r=0.69$, $p=0.01$). As well as there was significant intermediate correlation between the post-Balance Score and Post Gait Score ($r=0.505$. $p=0.01$).

**Conclusion**: There is no difference in the recovery related to balance and gait among right sided hemiplegia and left sided hemiplegia cases. The recovery should be focused on improving the balance function so that the gait function can be achieved in accordance with the balance function. The treatment process of balance and gait of the stroke cases should be focused depending upon the balance and gait functions (severity) before the beginning of the treatment rather than depending on the side of the stroke.



**Keywords:** Stroke, Balance, Gait