

# A Comprehensive Rehabilitation Protocol for a Patient with Left Hemiparesis and Cerebellar Ataxia: A Case Report

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## ABSTRACT

Stroke is a prevalent condition leading to balance and coordination disorders such as cerebellar ataxia making daily activities increasingly challenging. Additionally, preexisting age-related conditions such as degenerative knee arthritis and cervico-occipital hump can further complicate the rehabilitation process for the therapists. Therefore, it becomes crucial to develop a comprehensive rehabilitation protocol tailored to such patient's needs. A 62-years old male was assessed in his home setting and clinical Outpatient Department (OPD) sitting, comprehensively for higher mental functions, sensory, and motor systems. A tailored rehabilitation protocol was implemented four times weekly, with three follow-up assessments after 45 days to adjust exercises. Interventions included balance and coordination exercises, physical

conditioning, mobility training, postural correction, gait training, and electrotherapy modalities. The outcome measures used in this case were Scale for the Assessment and Rating of Ataxia (SARA), Berg Balance Scale (BBS) for balance and Functional Independence Scale (FIM) for functional improvement. The follow up assessment demonstrated significant improvement in balance and functional independence. Improvement in SARA score: from 29 to 8, BBS score: from 9 to 43 and FIM score: from 62 to 106. The patient was walking independently and shifting without any help. The multidimensional approach towards patient's need has shown significant improvement in term of functional independence, balance and overall quality of life.

**Keywords:** Cervico-occipital hump, Degenerative knee arthritis, Gait training

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