Spinocerebellar ataxia (SCA) comprises a family of autosomal dominant inherited disorders that result from progressive degeneration of the cerebellum and its associated systems [1]. Besides cerebellar deterioration, SCA is often accompanied by degeneration of other sites of the nervous system, leading to noncerebellar signs such as pyramidal and extrapyramidal losses, which are uncommon in ataxia of other etiologies and that can worsen the impairments of people with SCA [2]. Among the motor deficits prompted by SCA, those related to gait and balance are the most common [3]. Gait in SCA is usually described as uncoordinated, unsteady, wide-based, and highly variable [4–6]. In turn, balance abnormalities in SCA are characterized by an increased postural sway and poor balance control during both static and dynamic tasks [7]. It is noteworthy that both the balance and gait impairments in SCA are strongly associated with an increased number of fall episodes [8, 9] and can favor physical inactivity, adversely affecting cardiorespiratory fitness [10]. Together, these problems can impair mobility, deteriorate general health, and yield physical and social consequences for these individuals [7]. Despite the huge recent advances in neurogenetic research, an effective pharmacological approach to face this condition is still unknown [11, 12]. Indeed, with the exception of a few kinds of hereditary ataxia (e.g., Niemann–Pick disease type C, cerebrotendinous xanthomatosis, coenzyme Q-10 responsive ataxia, or ataxia with vitamin E deficiency), no specific treatments exist for hereditary ataxia, including SCA (for a review, see Jayadev and Bird [13]). In this context, rehabilitation strategies could represent an alternative to improve the physical condition and to reduce the impairments of these individuals. But, sadly, clinical trials testing the effects of physical therapy approaches in ataxia are scarce and the few existing studies include cerebellar ataxias of different etiologies, beyond SCA (for a review, see Martins et al. [14]) [15, 16]. As the natural course and prognosis are different between SCA and cerebellar ataxias of other etiologies it could be artificial to generalize the results from the available clinical trials to the SCA population, especially considering the peculiarity of the progressive degeneration found in SCA. In this context, it is relevant to advance strategies of rehabilitation that could benefit SCA individuals.