

Unconventional therapy for acute-onset post-stroke hemiballism: a care report

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Introduction: Cerebrovascular diseases are the most common causes of secondary hypokinetic or hyperkinetic movement disorders [1]. Among acute-onset hyperkinetic movement disorders, hemiballism is the most frequent one [2]. Involuntary movements may severely compromise patients' quality of life and expose them to the risk of injuries. In these cases, symptomatic treatments are required: typical and atypical neuroleptics as well as tetrabenazine represent therapy of choice. On the other hand, anecdotal reports of antiseizures medications effectiveness have been rarely described [1-3].

Case presentation: A 78 years-old man with an history of vascular parkinsonism and undetermined generalized seizures, came to our attention for an acute-onset left hemiballism with homolateral hemiparesis. Brain CT scan showed a right thalamo-mesencephalic hemorrhage, while blood exams revealed acute renal failure secondary to severe rhabdomyolysis. Due to the persistence of severe hemiballism causing interference even with sitting balance and any rehabilitation approach together with the ongoing rhabdomyolysis, symptomatic therapy was required. Nevertheless, consistently prolonged QT interval at electrocardiograms and renal function impairment limited the dosage of neuroleptics and benzodiazepines, respectively. One month after hospital admission the left-sided involuntary movements remained disabling, despite several combined approaches including tetrabenazine, low-dose of quetiapine, clonazepam and diazepam. Thus, the patient received botulin neurotoxin injections in his left upper limb muscles (Botox 200 UI: biceps brachii, triceps brachii, teres major, deltoid) and low-dose of topiramate (37.5 mg/die) in up-titration, that were followed by the gradual reduction of hyperkinetic movements.

Conclusions: The present case highlights the effectiveness of unconventional therapeutic options in disabling acute onset post-stroke hemiballism when first-line therapies are contraindicated. In selected cases, second and third-line agents might be combined with good functional outcome.

References

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