Letter by Santos-Pontelli et al Regarding Article, “Prevalence and Length of Recovery of Pusher Syndrome Based on Cerebral Hemispheric Lesion Side in Patients With Acute Stroke”

To the Editor:

We read with interest the article by Abe et al1 regarding the prevalence and length of recovery of pusher behavior (PB) in patients with acute stroke. Their retrospective cohort study included 1660 patients with acute stroke. According to authors, study subjects were daily assessed for PB and were assessed during their initial physical therapy for lower limb impairments, presence of sensory deficits “and/or” neglect, degree of consciousness disorder, and activities of daily living function. They found higher prevalence and length of recovery of the PB in patients with right cerebral hemisphere stroke.

The length of recovery of PB (and other neurological deficits) has been associated with several aspects such as physiotherapy, previous encephalic lesions, nonneurological clinical complications, neglect, and depression.2,3 Therefore, we have some questions/comments regarding the conclusions of this study.

First, we wonder if patients with right and left hemispheric lesions had engaged to the same extent to their rehabilitation program, including frequency and duration of the sessions, the physiotherapy strategies used and specific approaches for PB, individual or group sessions, and other therapies (ie, occupational therapy). Indeed, we have recently reported 3 cases of patients with stroke who presented the PB for >2 years with important disabling consequences on their functional outcome.4 Factors that negatively influenced this persistent PB were the limited number of rehabilitation sessions and the absence of specific strategies for PB treatment.

Another important piece of information that is lacking and may have implications on the conclusions is the presence of depressive symptoms. Poststroke depression has been associated with right hemisphere strokes, and its presence may influence adherence to rehabilitation.5 Therefore, any imbalance between depressive symptoms between those groups could be related to the longer duration of PB among patients with right hemisphere strokes.

Third, although the authors have mentioned that they excluded “other brain lesions, coma or dementia,” it would be necessary to clarify if they have controlled for nonneurological clinical complications because those complications can interfere in the rehabilitation program.

Furthermore, it is noteworthy that they did not find a significant difference in the frequency of neglect between patients with right (68%) and left (50%) hemisphere lesions.1 Authors have used the Stroke Impairments Assessment Set as the only method to assess neglect. It is widely discussed that using several tests is a more reliable way to uncover evidence of neglect than a single test and the sensitivity of the Stroke Impairments Assessment Set for neglect could be questioned. Moreover, handedness and hemianopia should also be evaluated. Therefore, it remains an issue for future studies whether the prognosis of PB is related to the presence of neglect itself (that is more frequent after right cerebral lesions) or to a greater relevance of the right hemisphere for the perception of verticality.6

Disclosures

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Taiza E.G. Santos-Pontelli, PT, PhD
Octavio M. Pontes-Neto, MD, PhD
Joao P. Leite, MD, PhD
Department of Neuroscience and Behaviour
School of Medicine at Ribeirao Preto
University of Sao Paulo
Sao Paulo, Brazil