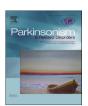
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Letter to the Editor

Levodopa treatment in Parkinson's disease: How does it affect dysphagia management?

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Dear Editor

We read with interest the article from this journal where Melo & Monteiro [1] discuss the lack of evidence in swallowing improvement after levodopa treatment in individuals with Parkinson's disease (PD). The authors present controversial data of studies that investigated change in events of oral and pharyngeal phase of swallowing measured by instrumental tests.

Despite the presented results, we would like to highlight that while dealing with dysphagia physicians should consider not only aspects measured by instrumental tests, such as videofluoroscopy or flexible endoscopic evaluation of swallowing, as dysphagia compromises pulmonary health. Besides that, swallowing alterations also have a significant impact on nutritional status and on life quality of PD patients.

In our daily clinical practice patients, relatives and caregivers report an independence improvement to feed and an increase in the amount of food intake during meals which are held after levodopa administration. It is important to note that dependence to feed themselves is shown in a study with 102.842 institutionalized elderly persons as an independent predictor of aspiration pneumonia, principally in those with dysphagia or reduced cognitive status [2].

Motor symptoms of PD interfere with hand ability to use cutlery, diminishing consumption of solid foods, thus resulting in a lesser consumption of some nutrients. After levodopa intake, reduction of motor symptoms may facilitate the handling of utensils and the mouth and hand coordination during feeding, collaborating to a better quantity and quality of oral food intake, injured aspects in individuals with PD. It is also directly related to weight maintenance and nutritional security [3].

The increase of autonomy to take food to the mouth and the perception of an improvement reported by patients while feeding during the effect of medicine may also reduce the embarrassment of feeding themselves in public and enhance sharing meal experi-

In this way, we believe self-food supply should be encouraged and performed in the "on" medication state and reduction of PD motor signals can be observed.

ences with friends and relatives, positively influencing on life quality of individuals with PD [4].

We still have to highlight that the undoubtedly improvement of motor system due to the use of levodopa makes possible the adoption of compensatory swallowing postures that increase the airways protection during swallowing, thus restoring a safe oropharyngeal transit of food in individuals with neurogenic dysphagia [5].

In this manner, the lack of evidences regarding levodopa efficiency in the improvement of events of oropharyngeal dynamic of swallowing [1] should not justify the consumption of meals in the "off" levodopa state. We can not lose sight of motor symptom improvement which allows the management of aspects that interfere with nutritional status, patients' life quality and compensatory strategies for protection and cleaning of airways during feeding, which may reduce the frequency of episodes of laryngeal penetration and food aspiration, responsible for development of respiratory infections and death in the studied population.

We suggest, therefore, that future studies aiming to investigate the efficiency of levodopa treatment in order to improve swallowing in patients with PD should also assess its impact on feeding, measuring nutritional and life quality outcomes concerning feeding in both "on" and "off" medication states.

Best regards

Conflict of interest

The authors report no financial relationships or conflicts of interest to disclose.

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Letter to the Editor / Parkinsonism and Related Disorders xxx (2013) 1–2

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2

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