

A Taste for Stroke

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Dysphagia is a common complication after stroke and its adequate management can prevent complications and improve outcomes¹. Although post stroke dysphagia generally improves, it carries a sevenfold increased risk of aspiration pneumonia and is an independent predictor of mortality¹. On the other hand, the frequency of gustatory dysfunction after stroke is less well established and it is usually associated with dysphagia. Taste disorders after stroke may often go unnoticed by the physicians and patients². Moreover, taste has the potential to affect swallowing due to its influence on respiration-swallowing coordination and on autonomic nervous system responses. Sensory input is important to the initiation and regulation of swallowing and can promote changes in neuronal circuits³. The extent to which taste can influence swallowing after stroke is not well understood. In this issue of *Revista Neurociências*, Alves *et al.* evaluated the influence of different bolus tastes upon swallowing in a series of patients after stroke and in normal controls using the scintigraphic method⁴. In both groups there were no differences between neutral, sweet, sour or bitter tastes. However, pharyngeal transit and clearance was longer in patients with stroke for the sweet and bitter tastes. This is a preliminary study that highlights the importance of evaluating different strategies in dealing with dysphagia after stroke. Although the authors did not find major differences between neutral, sweet, sour or bitter tastes, the groups were small and studies evaluating more patients selected based on stroke location and the presence of taste disorder might be able to depict subtle differences. There are few clinical trials guiding dysphagia management after stroke. Overall, the goal is to keep patients safe and prevent aspiration pneumonia. Compensatory strategies

such as changing food consistencies, regulating bolus size and head rotation before swallowing are commonly used⁵. Few data support thermal or chemical stimulation as possible therapies for neurogenic dysphagia. The impact of finding an effect of bolus taste on oral and pharyngeal transit of patients with stroke would be that therapy therapy could be planned using tastes with best pharyngeal transit and clearance⁶. Another window of opportunity for post stroke dysphagia management would be to investigate if different tastes in specific temperatures influence the oral and pharyngeal transit of patients with stroke as previously suggested. While studies are being developed in the field, we should at least remember to evaluate gustatory function as well to screen for dysphagia in every patient after stroke.

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