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Letter to the Editor

Sialorrhea in Amyotrophic Lateral Sclerosis Depends on the Subtype, Current Medication, and the Presence of Vegetative Involvement

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Letter to the Editor

We read with interest the article by Baby *et al*. on a cross-sectional study of the severity of salivation in 70 patients with amyotrophic lateral sclerosis (ALS). The study used the Sialorrhea Scale (SSS) and interviewed the patients themselves or their relatives by telephone [1]. Overall, 40% of the patients reported sialorrhea, which was classified as mild in 15 patients, moderate in 9 patients, severe in 2 patients, and heavy in 2 patients [1]. Only 9 patients were receiving anticholinergic medication [1]. Patients with bulbar onset and longer disease duration exhibited more pronounced salivation than patients with limb onset or shorter disease duration [1]. The study is promising, but some points require further clarification.

The first issue is that current medication was not adequately included in the analysis [1]. Although the methods section mentions that patients were asked about medications with anticholinergic effects, their influence on the results is not described in the results section [1]. Knowledge of all medications is crucial, as some medications have cholinergic effects in addition to anticholinergic ones and can therefore increase salivation. Cholinergic effects are typically seen with cholinesterase inhibitors, varenicline, cevimeline, and pilocarpine [2]. How many patients were taking riluzole? Riluzole is known to cause dry mouth [3]. It is also crucial to know how many patients received intermittent positive pressure ventilation, as this can dry out the mucous membranes.

Second, the effect of anticholinergics on salivation was not adequately documented [1]. In how many patients who received anticholinergics did salivation cease completely, and in how many was an improvement in salivation observed? Did patients in whom anticholinergics were insufficiently effective, receive botulinum toxin or external beam radiation therapy?

Third, it was not reported how many patients had autonomic nervous system involvement. Knowing the nature and frequency of this involvement is important, as it can influence the degree of salivation [4]. Patients with parasympathetic hyperactivity may exhibit increased salivation.

Fourth, the criteria used to diagnose ALS were not specified [1]. Were the El Escorial criteria, the revised El Escorial criteria, the Awaji-Shima criteria, the Gold Coast criteria, or the modified Gold Coast criteria applied? Was ALS diagnosed in all 70 patients according to the same criteria? Knowledge of the diagnostic criteria is crucial, as the frequency of drooling may depend on it.

The fifth issue is that it was not specified whether only patients with sporadic ALS or also those with familial ALS were included [1]. Knowing the ratio of familial to sporadic ALS is crucial, as the frequency and extent of salivation can vary between the two groups [5].

Sixth, it was not reported how many patients and how many caregivers completed the questionnaire. This is essential because the perception of symptoms can vary considerably between those with the disease and those merely experiencing the symptoms [6].

Finally, it should be explained why a language barrier was an exclusion criterion, given that the patients received regular follow-up and were cared for in a neuropalliative setting. How did the patients communicate during these regular follow-up visits?

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