

SWALLOWING IN PATIENTS WITH DISORDERS OF CONSCIOUSNESS: A BEHAVIORAL STUDY

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01 INTRODUCTION

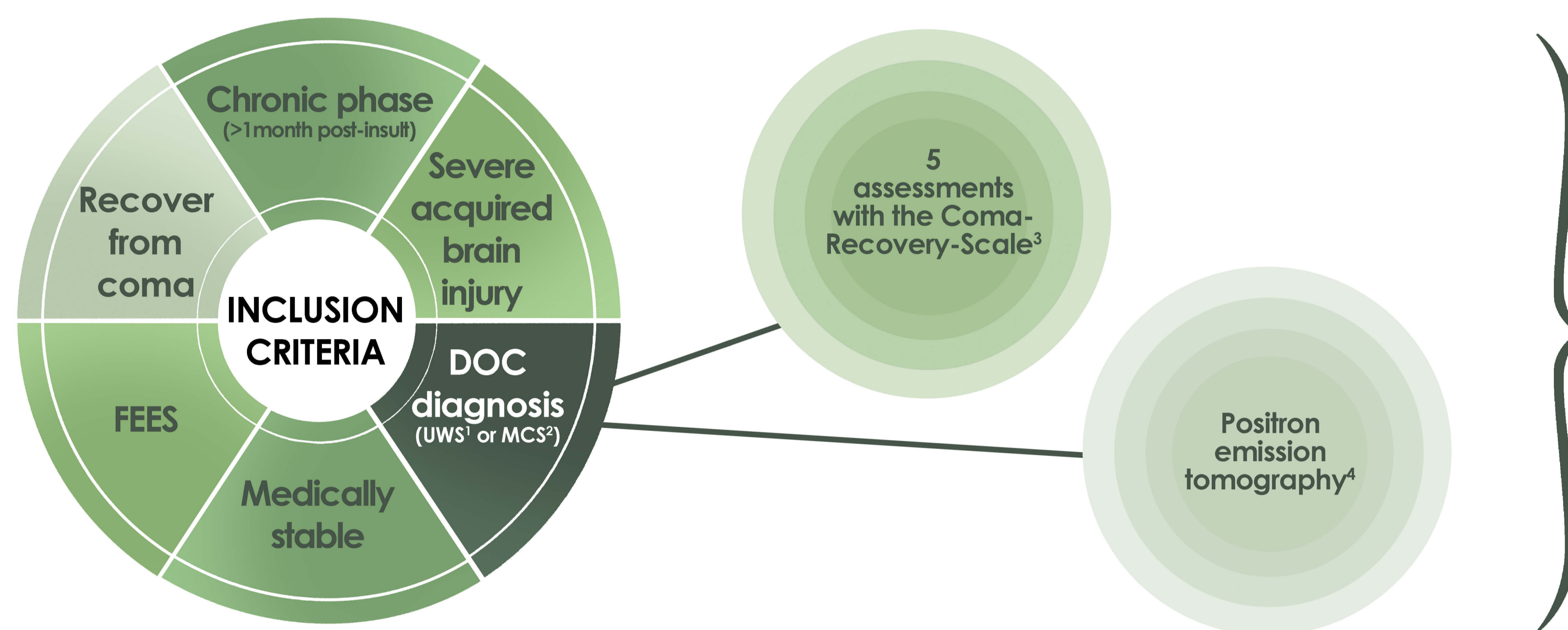
After a period of coma, a proportion of patients with severe brain injury remain in an altered state of consciousness before regaining partial or complete recovery. Patients with disorders of consciousness (DOC) classically receive hydration and nutrition through an enteral feeding tube, however, the impact of consciousness on swallowing is largely unknown.

The aims of this study were to document the incidence and characteristics of dysphagia in DOC patients and to evaluate the link between different components of swallowing and the level of consciousness.

METHOD 02

We retrospectively analyzed 10 criteria in link with the respiratory status, oral feeding and otolaryngologic examination of swallowing of DOC patients (UWS and MCS) admitted for a one-week multimodal assessment of consciousness.

First, we did an univariate logistic regression between each criteria and consciousness diagnosis (UWS or MCS). In a second time, logistic regression adjusted for time since insult and etiology was performed.

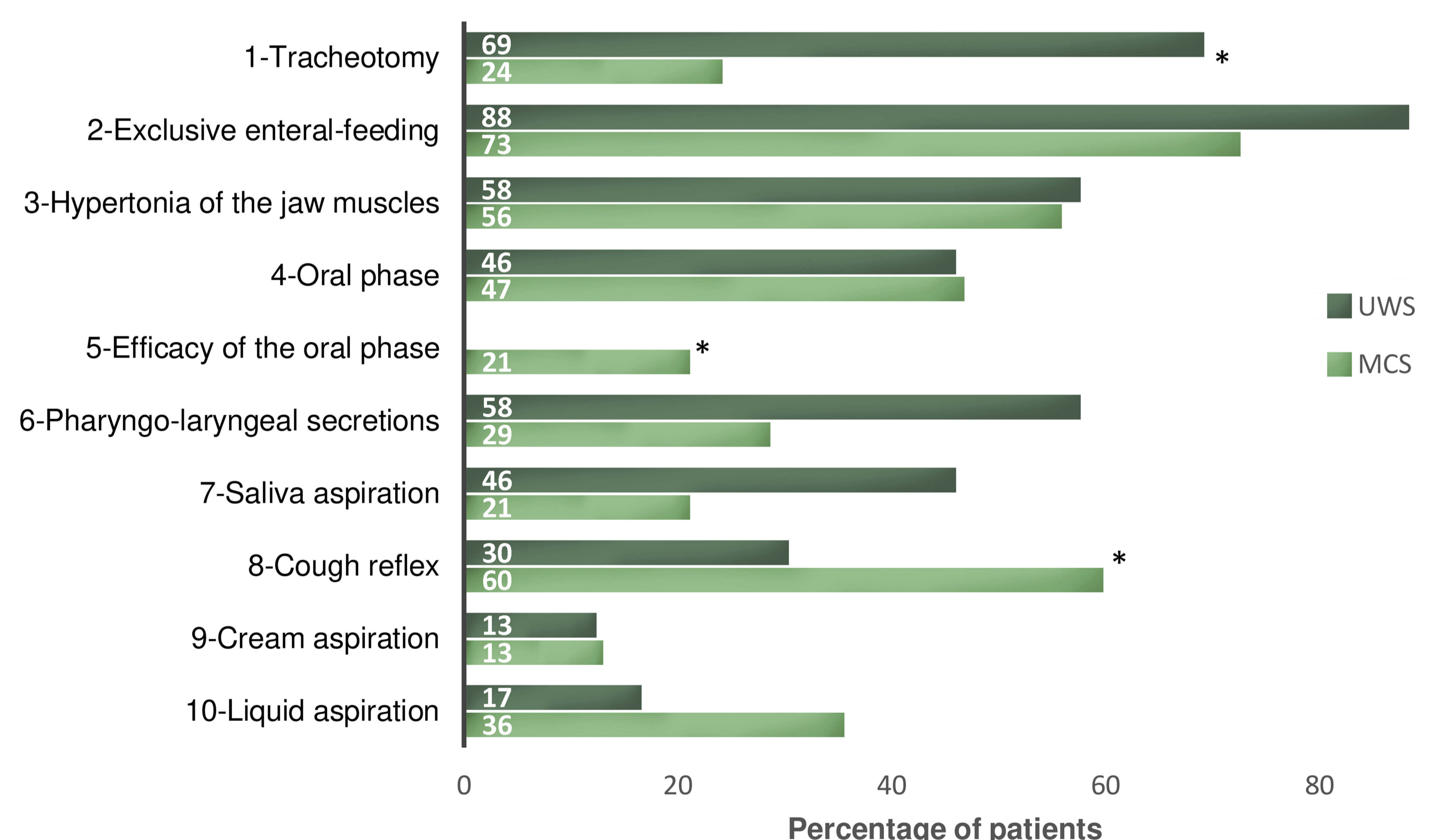


UWS = unresponsive wakefulness syndrome; UWS is characterized by the presence of eye-opening and reflexive movements, without conscious behaviours.

MCS = minimally conscious state; individuals with MCS show reproducible but inconsistent signs of consciousness, such as command following, visual pursuit, and localization to noxious stimulation.

03 RESULTS

A total of 92 DOC patients were included, 26 patients with UWS and 66 MCS. Deficits in the oral and/or pharyngeal phase of swallowing were present in 99% of the patients. Compared to MCS patients, UWS patients were more frequently tracheotomized with diminished cough reflex and no effective oral phase. In addition, no UWS participant could be fed entirely orally, whereas no MCS participant orally received ordinary food.



04 CONCLUSION

Almost all DOC participants had severe dysphagia. Some components of swallowing seem to be in link with the level of consciousness, particularly the efficacy of the oral phase of swallowing. Our study also confirms that objective swallowing assessment can be successfully completed in DOC individuals and that specific care is needed to treat severe dysphagia in DOC.

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