

INTRODUCTION

- COVID-19, an infectious respiratory disease caused by the novel SARS-CoV-2 virus, has been known to cause debilitating cardiopulmonary effects on patients.¹
- To date, the incidence of dysphagia in this patient population has not been described, although COVID-19 patients are hypothesized to be at higher risk of dysphagia secondary to intubation needs and overall deconditioning.²⁻³
- Dysphagia does not only impact the patient experience causing delays in recovery, but also has been shown to dramatically increase healthcare costs.⁴
- Study Aim:** to better understand the rates, potential risk factors, and complications of dysphagia in hospitalized COVID+ patients with the overall goal of understanding what patient populations may be at greatest risk and necessitate early intervention for dysphagia therapy.

METHODS

- Retrospective review of hospitalized COVID-19 patients across the five Medical University of South Carolina campuses from 3/1/2020-10/1/2020
- Inclusion criteria: age ≥ 18 , active diagnosis of dysphagia, SLP evaluation confirming dysphagia
- Exclusion criteria: pre-admission enteral access (PEG or NG tube), SLP evaluation demonstrating normal swallow, and lack of dysphagia association with COVID-19 admission (e.g. pre-morbid)
- Statistical analysis was performed using student's t-test. P value ≤ 0.05 was considered statistically significant

RESULTS

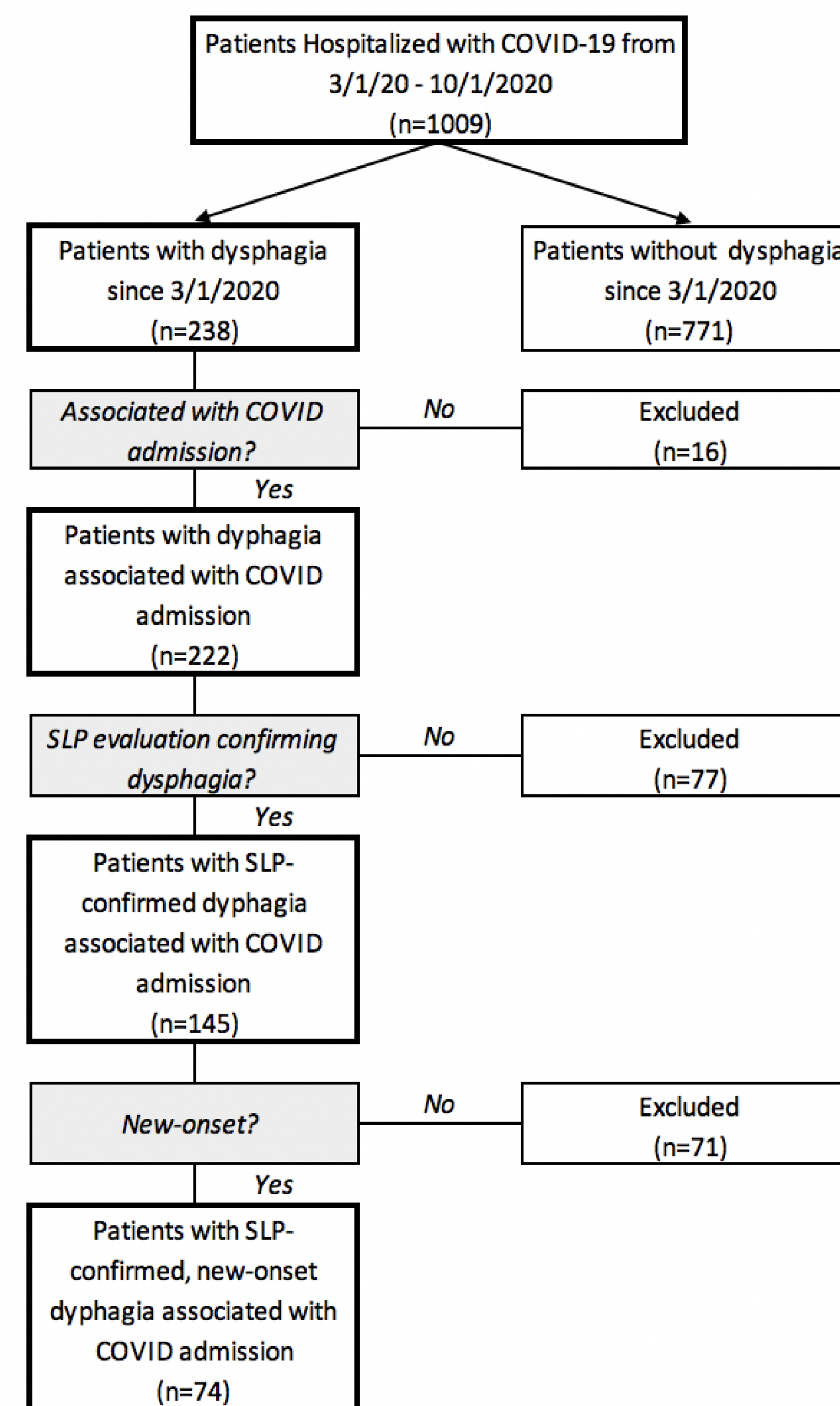


Figure 1. Inclusion and Exclusion Criteria for Dysphagia Patients. Of the 238 patient with a dysphagia diagnosis since 3/1/2020, only 74 were included in the data analysis due to presence of new onset, SLP-confirmed dysphagia associated specifically with the COVID admission.

- 74 patients met inclusion and exclusion criteria for the dysphagia cohort (Figure 1). Demographics are seen in Table 1.
- On average, first SLP evaluation occurred 11.35 days after hospitalization
- 20 patients (27%) resumed normal diet at discharge. 15 patients (20%) required PEG.
- 38 patients (51.4%) were intubated for an average length of 11.9 days.

Table 1. Patient Demographics for New-Onset Dysphagia Associated with COVID-19

Gender	
Male	37 (50%)
Female	37 (50%)
Age, average (years)	65
Race	
Black/African American	42 (56.8%)
White/Caucasian	23 (31.0%)
Other	9 (12.2%)
Ethnicity	
Not Hispanic or Latino	67 (90.5%)
Hispanic or Latino	7 (9.5%)
Co-Morbidities	
Hypertension	52 (70.2%)
Diabetes Mellitus	34 (45.9%)
Previous stroke	23 (31.1%)

Table 2. Length of Stay, 30-Day Mortality, and Number of Consulting Services in Dysphagia Group versus Non-Dysphagia Group

	Dysphagia Group	Non-Dysphagia Group	p-value
Average Length of Stay (Days)	22.9	6.73	<0.001
30-Day Mortality (Percentage)	18.9	14.6	0.297
Number of Consulting Services	4.8	1.67	<0.001

DISCUSSION

- There was a statistically significant increase in length of stay and number of consulting services in the dysphagia group compared to the non-dysphagia group.
- Importantly, it took 11.35 days on average for the first SLP evaluation. Although this could be due to COVID protocols and/or inability for patients to physically participate in therapy, it also may represent delays in care
- Although post-intubation dysphagia is thought to play a significant role in dysphagia associated with COVID-19, only 51.4% of patients were intubated.

CONCLUSION

While many providers understandably focus on the cardiopulmonary effects of COVID-19 disease, dysphagia can significantly impact the patient recovery. Early screening and intervention for patients with COVID-19 should be completed to prevent potential sequelae of dysphagia, including the need for long-term enteral access, increased length of stay, and mortality.

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