

Case Diagnosis

A 64 year old woman with an initial diagn of cervical myelopathy and Acute Motor Axonal Neuropathy (AMAN) was subsequently diagnosed with Amyotrophi Lateral Sclerosis (ALS).

Case Description

A 64 year old woman with a diagnosis of cervical myelopathy and AMAN was adm to an inpatient rehabilitation facility with quadriplegia and reduced respiratory cap which was attributed to new onset cardiomyopathy.

Her rehabilitation course was notable for dyspnea and failure to progress in therap Later, she developed progressive dyspho dysphagia, and reduction in her vital capa

Given her progressive symptoms, electrodiagnostic testing was repeated ai findings were consistent with ALS. She changed her code status to Do Not Resuscitate (DNR) and decided against tracheostomy. She opted for percutaneou gastrostomy tube (PEG) placement prior discharge home with hospice.

The Diagnostic Challenge of Amyotrophic Lateral Sclerosis During the COVID-19 Pandemic

Prabhav Deo, MD^{1,2}; Alan Anschel, MD^{1,2}

¹Shirley Ryan AbilityLab, Chicago, IL; ²Northwestern University/Feinberg School of Medicine, Chicago, IL

Table 1: Comparison between Diagnoses

		rabie il companeeri betticen blagneeee			
osis		Cervical Myelopathy	AMAN	ALS	
ic	Onset	Gradual	Rapid	Gradual	
	Natural History	Variable	Monophasic	Progressive	
	Upper Motor Neuron Signs	Present	Absent	Present	
nitted	Lower Motor Neuron Signs	Absent	Present	Present	
pacity,	Sensory Changes	Present	Absent	Absent	
	Respiratory Dysfunction	Possible	Common	Common	
oies. onia, acity.	Tongue atrophy	Absent	Rare	Common	
	Sensory NCS	Normal	Normal	Normal	
	Motor NCS	Normal	Abnormal	Abnormal	
	Activation	Reduced activation	No change	No change	
nd the	Denervation changes	Minimal	Fibrillation potentials, positive sharp waves	Fasciculation potentials, fibrillation potentials, positive sharp waves	
r to	Recruitment	No change	Reduced	Reduced	
	Motor Unit Remodeling	None	Possible	Present	

Discussion

- conditions.

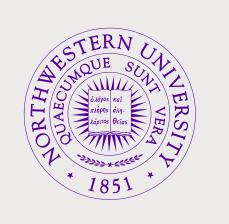
- case.

Conclusion

- clinical scenario.

References

1. Preston, D. C., & Shapiro, B. E. (2005). *Electromyography* and neuromuscular disorders: Clinical-electrophysiologic correlations. Philadelphia: Elsevier Butterworth-Heinemann.



NORTHWESTERN UNIVERSITY

• ALS is a progressive neurodegenerative disorder that can mimic other neurologic

 Cervical myelopathy and AMAN have signs and symptoms that overlap with ALS. Key differentiating factors between these conditions is natural history, physical exam findings, and electrodiagnostic findings. • The COVID-19 Pandemic precluded the patient's follow-up with her neurologist, and made medical record acquisition difficult. • The use of telehealth medicine for repeated follow up could have been useful in this

• ALS remains a diagnostic challenge due to its progressive nature and shared features with other neurologic conditions.

• Serial examination and repeat electrodiagnostic testing can secure a diagnosis in an ambiguous

 Maintaining close communication with all members of the clinical team facilitates diagnosis and clinical decision making.