

Supplementary Material

Unilateral Vocal Cord Paralysis Following COVID-19 Infection: A Case Report and Literature Review

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Table 1: Vocal Cord Paralysis Cases caused by COVID-19 Infection reported in the Literature
Abbreviations: M: Male, F: Female, LEMG: Laryngeal Electromyography

Rapoport et al. [5]	67	M	Alterations in the voice	Around 3 months post COVID	Left vocal fold paralysis	Laryngoscopy and stroboscopy	Restalyne injection on the left
Rapoport et al. [5]	29	F	Alterations in the voice	Around 3 months post COVID	Left vocal fold paralysis	Vagal neuropathy observed by LEMG	Restalyne injection on the left
Rapoport et al. [5]	28	F	Alterations in the voice	Around 3 months post COVID	Left vocal fold paralysis	Laryngoscopy and stroboscopy	Voice therapy and supportive care

Publication	Rapoport et al. [5]	Rapoport et al. [5]	Rapoport et al. [5]	Rapoport et al. [5]	Rapoport et al. [5]	Rapoport et al. [5]	Rapoport et al. [5]	Rapoport et al. [5]
Age	41	40	51	28	46	53	72	
Sex	F	F	F	M	M	M	M	
Clinical Presentation	Alterations in the voice	Alterations in the voice	Alterations in the voice	Alterations in the voice	Alterations in the voice	Alterations in the voice	Alterations in the voice	Alterations in the voice
Timeline of presentation post COVID	Around 3 months post COVID	Around 3 months post COVID	Around 3 months post COVID	Around 3 months post COVID	Around 3 months post COVID	Around 3 months post COVID	Around 3 months post COVID	Around 3 months post COVID
Diagnosis	Right vocal fold paresis	Left vocal fold paresis	Left vocal fold paresis	Left vocal fold paresis	Left vocal fold paresis	Left vocal fold paresis	Left vocal fold paresis	Left vocal fold paralysis
Method for diagnosis	Laryngoscopy and stroboscopy	Laryngoscopy and stroboscopy	Laryngoscopy and stroboscopy	Laryngoscopy and stroboscopy	Laryngoscopy and stroboscopy	Laryngoscopy and stroboscopy	Laryngoscopy and stroboscopy	Laryngoscopy and stroboscopy
Treatment	Voice therapy and supportive care	Voice therapy and supportive care	Voice therapy and supportive care	Voice therapy and supportive care	Voice therapy and supportive care	Voice therapy and supportive care	Voice therapy and supportive care	Restalyne injection on the left (2 times)

Publication	Korkmaz and Güven ⁽⁷⁾	Al-Ani and Rashid ⁽⁶⁾	Rapoport et al. ⁽⁵⁾	Rapoport et al. ⁽⁵⁾	Rapoport et al. ⁽⁵⁾	Rapoport et al. ⁽⁵⁾	Rapoport et al. ⁽⁵⁾
Age	57	NA	59	70	53	33	59
Sex	F	NA	F	M	M	F	F
Clinical Presentation	Hoarseness	Dysphonia	Alterations in the voice	Alterations in the voice	Alterations in the voice	Alterations in the voice	Alterations in the voice
Timeline of presentation post COVID	14 days after COVID positive test	During COVID	Around 3 months post COVID	Around 3 months post COVID	Around 3 months post COVID	Around 3 months post COVID	Around 3 months post COVID
Diagnosis	Left vocal cord paralysis observed in the cadaveric	Right vocal cord paralysis	Bilateral vocal fold paresis	Left vocal fold paresis	Left vocal fold paresis	Left vocal fold paresis	Left vocal fold paresis
Method for diagnosis	Laryngoscopy. Other etiologies were ruled out through MRI and CT scan	Laryngoscopy	LEMG	Laryngoscopy and stroboscopy	LEMG	Laryngoscopy and stroboscopy	Laryngoscopy and stroboscopy
Treatment	Voice therapy and injection laryngoplasty with Radiesse® injection into the left vocal cord under general	Voice rest, steam inhalation and supportive treatment	Voice therapy and supportive care	Restalyne injection on the left	Voice therapy and supportive care	Voice therapy and supportive care	Voice therapy and supportive care

Publication	Eliteley and Nassar ^[8]	Zamzam and Hanafi ^[8]	Zamzam and Hanafi ^[8]	Zamzam and Hanafi ^[8]	Zamzam and Hanafi ^[8]	Zamzam and Hanafi ^[8]	Zamzam and Hanafi ^[8]	Zamzam and Hanafi ^[8]
Age	27	69	44	51	41	39	48	
Sex	M	M	F	F	M	F	F	F
Clinical Presentation	Hoarseness	Hoarseness and choking	Hoarseness	Hoarseness	Hoarseness	Hoarseness	Hoarseness and choking	Hoarseness and choking
Timeline of presentation post COVID	During COVID	During COVID	During COVID	Not applicable	3 weeks after COVID	During COVID infection	During COVID infection	During COVID infection
Diagnosis	Right vocal fold paralysis	Right vocal cord paralysis	Left vocal cord paralysis	Left vocal cord paralysis and right vocal cord paresis	Left vocal cord paralysis	Right vocal cord paralysis	Right vocal cord paralysis	Right vocal cord paralysis
Method for diagnosis	Transcervical laryngeal ultrasound	Flexible fiberoptic laryngoscopy	Flexible fiberoptic laryngoscopy	Flexible fiberoptic laryngoscopy	Flexible fiberoptic laryngoscopy	Flexible fiberoptic laryngoscopy	Flexible fiberoptic laryngoscopy	Flexible fiberoptic laryngoscopy
Treatment	Spontaneous recovery	Spontaneous recovery	Spontaneous recovery	Spontaneous recovery	Spontaneous recovery	Spontaneous recovery	Spontaneous recovery	Required cord medialization on follow-up

Publication	An et al. [15]	Moyano et al. [14]	Dean et al. [13]	Nadiger et al. [12]	Taylor- Robinson [11]	Tin et al. [10]
Age	47	38	15	15	NA	58
Sex	F	F	F	F	M	M
Clinical Presentation	Vocal discomfort	Dysphonia, dysphagia and neuropathic pain	Difficulty breathing with biphasic stridor	Cephalalgia, hoarseness, muffling of voice, dysphagia, globus	Dysphonia	Hoarseness
Timeline of presentation post COVID	3 months post COVID	During COVID	During COVID	During COVID	3 months post COVID	43 days post COVID
Diagnosis	Bilateral vocal fold paresis	Right vocal cord paresis	Left vocal fold paresis	Hypomobile right vocal cord	Left vocal cord thinning and paresis	Left vocal cord paralysis
Method for diagnosis	Videostroboscopic examination and laryngeal electromyography	Fiberoptic nasolaryngoscopy and videofluoroscopic swallowing study	Flexible nasolaryngoscopy	Flexible laryngoscopy	Laryngoscopy	Laryngoscopy
Treatment	Voice therapy and calcium hydroxyapatite injection	Pregabalin administered using a nasogastric tube. Dexamethasone and lidocaine	Methylprednisolone and IVIG	Speech therapy	Recovery after 4 months with speech and language therapy	Vocal fold injection with Prolayn gel was scheduled for later