

Table S1. Summary of the demographic data, clinical features, investigations and treatment outcomes of patients with neuralgic amyotrophy after COVID-19 infection

Ref. no.	Age/ Sex	COVID-19 confirmatory test	Onset from COVID-19 diagnosis (day)	ICU stay (Yes/No) and COVID-19 severity	Other medical history	Clinical features	Timing of NCS in relation to neurological symptom onset	NCS/EMG findings	MRI brachial plexus findings	Treatment	Outcome
1	52/M	Oropharynx swab PCR positive	14	No Severity: Mild	-	Severe pain and progressive weakness. Weakness and numbness of upper limb	>28 days (no actual duration reported)	Lower trunk brachial plexus	Oedema and enhancement of right distal median nerve, ipsilateral C7-C8 root	Steroid	Partial pain relief. No motor/sensory improvement Follow-up: 6 weeks
2	52/M	Nasopharyngeal swab PCR positive	12	No Severity: Mild	-	Severe left upper limb pain with numbness. Normal power	5 weeks	Left lateral antebrachial cutaneous involvement	Not done	Not reported	No improvement Follow-up: 6 weeks
3	38/M	Positive (unclear type of test)	>14	Yes, ICU admission with 2 prone ventilation episodes Severity: Critical	-	Progressive bilateral shoulders pain and weakness. Deltoid/supraspinatus/infraspinatus atrophy. Deltoid numbness	Not reported	Upper trunk brachial plexus involvement	Bilateral infraspinatus muscle bellies oedema. Bilateral supraspinatus tendinosis	NSAIDs, steroids	Not mentioned Follow-up: not reported
4	32/M	Nasopharyngeal swab rT PCR positive	7	No Severity: mild	-	Left shoulder pain. Bilateral upper limbs weakness and numbness	5 weeks	Bilateral upper and middle trunks involvement	Hyperintense T2 signal of supra and infraspinatus muscles	Steroids (IV)	Partial relief of pain. No motor recovery. Follow-up: 8 weeks
5	46/F	Nasopharyngeal swab PCR positive	35	Yes, ICU for 23 days, intermittent prone ventilation Severity: Critical	Anxiety	Left shoulder pain, weakness and numbness	2-3 months	Left upper trunk involvement	Oedema of deltoid, teres major, teres minor and latissimus	Conservative (Maloxicam)	Full recovery Follow-up: 3 months

6	74/M	Nasopharyngeal swab PCR positive	42	Yes, 5 weeks ICU Severity: Critical	-	Left shoulder pain. Left trapezius and supra-infraspinous fossae atrophy	10 weeks	Left spinal accessory nerve axonal lesion. Reduced CMAP left upper and lower trapezius	Left trapezius amyotrophy and fatty infiltration	Not reported	Not reported Follow-up: Not reported
6	63/M	Nasopharyngeal swab PCR positive	70	Yes, 6 weeks ICU Severity: Critical	-	Right shoulder pain. Right trapezius, supra-infraspinous fossae atrophy. Paraesthesia of both ulnar of forearm	Around 3 months	Right spinal accessory nerve axonal lesion. Reduced CMAP left upper and lower trapezius	Right trapezius amyotrophy and fatty infiltration	Not reported	Not reported Follow-up: Not reported
7	52/M	rT PCR positive	28	Yes, 6-7 weeks in ICU without prone ventilation Severity: Critical	HTN DM	Left upper limb pain, weakness and numbness	Not reported	Pan-brachial plexopathy	Pan brachial plexus T2 hyperintensity and thickening with left serratus anterior oedema	Conservative	Partial motor improvement Follow-up: 27.14 weeks
8	36/M	COVID-19 IgG positive (prior infection)	14-21	No Severity: Mild	-	Right shoulder pain and weakness. Atrophy of supraspinatus, deltoid and biceps muscles	Not reported	Right upper trunk involvement	Supra- and infraspinatus T2 hyperintensity with global atrophy	Conservative	Full recovery Follow-up: 24 weeks
9	55/M	Nasopharyngeal rT PCR positive	49	Yes, supine position Severity: Critical	AF	Left upper limb weakness, numbness and pain	Week 7 in ICU	Pan-brachial plexopathy	Pan-brachial plexus T2 hyperintensity and active muscle denervation	Not reported	Not reported Follow-up: Not reported
10	69/M	Nasopharyngeal PCR positive	10	Yes, ICU 10 days Severity: Critical	DM HLD AF	Right upper limb weakness. Reduced	Day 21 from ICU stay, day 12 after symptoms	Upper trunk brachial plexopathy	Not reported	Conservative	Persistent numbness and weakness

				Severity: Critical		sensation over right deltoid, biceps, brachioradialis					Follow-up: Unclear
11	55/F	Nasopharyngeal PCR positive	11	Yes, ICU 11 days Severity: Critical	Obesity	Bilateral arms weakness. Numbness over bilateral axillary nerve distribution	Not reported	Bilateral pan- brachial plexopathy	Bilateral T1 hyperintensity of supra-, infraspinatus and deltoid muscles	Not reported	Not reported Follow-up: Unclear

AF: atrial fibrillation; DM: diabetes mellitus; EMG: electromyography; F: female; HLD: hyperlipidaemia; HTN: hypertension; ICU: intensive care unit; IV: intravenous; MRI: magnetic resonance imaging; M: male; NCS: nerve conduction study; NSAID: non-steroidal anti-inflammatory drugs; PCR: polymerase chain reaction; Ref: reference; rT: reverse transcription

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