

Supplementary Table 1: Master chart including the patient details

Patient number	Age	Gender	Extent (upper - C5-C7 and its corresponding trunks, lower - C8, T1 and the corresponding distal plexus)	Laterality	Nerve SNR (au)			Contrast ratio (au)	Clinical details	Imaging details	Management
					SHINKEI	STIR TSE	SHINKEI TSE				
1	43	Male	Upper	Right	71.09	57.85	0.66	0.38	Right brachial plexopathies. Weakness of right upper limb. Trauma 2 months before scan. NC study: Right brachial plexus injury	Right C6 nerve root hyperintense. Right upper, middle and lower trunks and posterior cord hyper intense	Surgery: Findings - "Damage" to right C5 and C6 postganglionic nerve roots Conservative
2	54	Male	Global	Left	67.03	53.49	0.62	0.37	Diabetic. Weakness of left upper limb, wasting of left arm for 3 months prior to scan. Difficulty in flexing elbow and gripping objects	Middle and lower trunks are mildly bulky and hyper intense	Conservative
3	51	Male	Upper	Right	77.53	60.44	0.59	0.36	Postthyroidectomy + neck dissection for metastatic papillary carcinoma. Postoperative developed inability to lift hand above shoulder	Hyperintensity on superior trunk of the brachial plexus. Sign of axonotmesis	Conservative
4	35	Male	Global	Right	91.87	75.43	0.60	0.36	Right postganglionic injury	Upper, middle and lower trunks, divisions and lateral cords are bulky and hyper intense. Features represent Grade 2 injury	Conservative
5	38	Male	Upper	Left	71.07	57.37	0.60	0.37	Weakness of left shoulder on abduction	C5, C6 nerve roots and upper trunk show minor hyperintensity. suggestive of neuropraxia. No evidence of discontinuity	Conservative
6	59	Male	Global	Left	80.02	75.15	0.66	0.45	Left brachial plexus injury for 2 years. Partially recovered. To look for spondylosis changes/compression of plexus/other causes	C6-C8 roots hyperintense, all 3 trunks. s/o neuropraxia	Conservative
7	35	Male	Global	Right	77.51	60.63	0.57	0.32	Right brachial plexus injury	Lateral pseudomeningoceles of C6-C8 nerve roots with extension through the neural foramina. C5 to T1 roots are bulky and hyperintense. Entire trunks, division and cord bulky and tortuous	Surgery: C5-C8 nerves avulsed
8	30	Female	Global	Right	88.84	71.03	0.58	0.36	Axillary soft tissue sarcoma, enblock removal with plexus	Neuroma on all right trunks. Divisions not visible	Conservative

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					SHINKEI	STIR TSE	SHINKEI	STIR TSE				
9	20	Male	Upper	Right	82.94	63.92	0.61	0.31	Right upper limb weakness. Difficulty in shoulder abduction and elbow flexion	Bulky and hyperintense right C5 and C6 nerve roots. With C6 pseudomeningiocyte. Sign of avulsion injury	Surgery: C5, C6 nerve root avulsed	
10	36	Male	N/A	Right	91.78	75.71	0.56	0.34	Right upper limb weakness with deformity. History of RTA a few months back. Power reduced in right hand	Normal study of the BP	Conservative	
11	39	Male	Global	Right	65.25	74.35	0.57	0.38	Right brachial plexus injury	C6/C7 nerve roots and trunks are hyperintense and bulky. s/o neuropraxia	Conservative	
12	22	Male	Global	Right	81.90	67.52	0.63	0.39	Left clavicle fracture and brachial plexus injury	C8, T1 root avulsion with pseudo meningocele formation. Grade 2 injury of C7 and C8 nerve roots	Surgery: C8, T1 root avulsed	
13	35	Male	Upper	Left	76.33	61.73	0.57	0.29	Left upper limb weakness with pain	Subtle hyperintensity of the left C5 nerve root s/o neuropraxia	Conservative	
14	35	Male	Upper	Right	74.98	75.52	0.58	0.34	History of trauma	The divisions from the superior trunk appears bright and the muscles are bright and bulkier. Neuropraxia involving C5/C6 roots	Conservative	
15	34	Male	Global	Right	87.37	66.33	0.61	0.39	History of RTA 1 month before imaging. Right global brachial plexus injury	Postganglionic C5-C8 appear hyperintense. All the trunks appear hyperintense. Features suggestive of axonotmesis	Surgery: Postganglionic nerve injury	
16	65	Male	Upper	Right	89.91	72.12	0.62	0.39	History of RTA 1.5 months before imaging. Right upper limb weakness. Not recovering	C5-C7 roots, upper and middle trunk and posterior cord appear bright. Muscles appear hyperintense and show denervation injury. s/o neuropraxia	Conservative	
17	21	Male	N/A	Right	69.09	70.55	0.59	0.37	Patient underwent right SLAP and BANKART REPAIR. Patient did not follow exercise for 9 months, now unable to lift shoulder. Also, numbness in the right upper limb	Normal	Conservative	

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					SHINKEI	STIR TSE	SHINKEI	STIR TSE			
18	45	Male	Global	Bilateral	N/A	N/A	N/A	N/A	Cervical radiculopathy and brachial plexopathies	C5-C7 nerve roots affected. Right > left	Conservative
19	40	Male	N/A	Right	59.92	63.13	0.61	0.35	Severe neck pain. Radiating to right shoulder. No history of trauma	Normal	Conservative
20	30	Male	Global	Right	78.33	57.05	0.65	0.45	Right brachial plexus injury	C8, T1 roots Pseudomeningocele along, C5-C7 are bulky, hyperintense. Upper, middle and lower trunks wavy. Divisions, and nerves arising from them are hyperintense. Edema in one of the back muscles	Surgery: C5 to T1 fibrosed
21	29	Male	Global	Left	78.35	58.22	0.60	0.36	RTA clavicle fracture	Traumatic avulsion of C6-C8 rootlets. Possible neurotmesis injury at upper left trunk	Surgery: C6-C8 fibrosed
22	20	Male	Upper	Right	95.45	70.37	0.60	0.39	Swelling in the right side of neck? Nerve sheath tumor	A well-defined structure arising from the middle trunk as it crosses the scalene muscle-s/o neurofibroma	conservative
23	17	Male	Global	Right	86.31	68.45	0.65	0.33	Ulnar sided weakness since 1 month. Tests of TOS positive	Normal study of brachial plexus	Conservative
24	22	Male	Upper	Right	67.93	55.35	0.61	0.39	Right brachial plexus injury. Penetrating trauma	Hyper intensity of C5, C6 roots, upper trunks, and its divisions. Muscle presents edema. Features likely of Grade 2 - Grade 3 injury	Conservative

NC: Nerve conduction, BP: Blood pressure, RTA: Renal tubular acidosis, N/A: Not available, TOS: Thoracic outlet syndrome, SNR: Signal-to-noise ratio, SHINKEI: Sheath signal increased with INKed rest-tissue RARE Imaging, STIR TSE: Short-term inversion recovery turbo spin-echo