

Supplementary Table 4: Patient subset who underwent surgery

Patient number	Age	Extent (upper - C5-C7 and its corresponding trunks, lower - C8, T1 and the corresponding distal plexus)	Laterality	Clinical details	Imaging details	Management	Observations for avulsions on individual sequences (minimum 2 weeks eyewash period)		
							SHINKEI	STIR TSE	DWIBS
1	43	Upper	Right	Right brachial plexopathies. Weakness of right upper limb. Trauma 2 months before scan. NC study. Pan postbrachial plexus injury	Right C6 nerve root hyperintense. Right upper, middle and lower trunks and posterior cord hyperintense	Surgery: Findings - "Damage" to right postganglionic C5 and C6 nerve roots	C7 (false positive)	None	None
7	35	Global	Right	Right brachial plexus injury	Lateral pseudomeningocele 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	C5-C8	C6-C8 (one false negative)	C7, C8 (two false negatives)
9	20	Upper	Right	Right upper limb weakness. Difficulty in shoulder abduction and elbow flexion	Bulky and hyperintense right C5 and C6 nerve roots. With C6 pseudomeningocele. Sign of avulsion injury	Surgery: C5, C6 nerve root avulsed	C5, C6	C5, C6	None (two false negatives)
12	22	Global	Left	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	C8, T1	C8, T1	None (two false negatives)
15	34	Global	Right	History of RTA a month prior to imaging. Right global brachial plexus injury	Postganglionic C5-C8 appear hyperintense. All the trunks appear hyperintense. Features suggestive of axonotmesis	Surgery: Postganglionic nerve injury	None	None	None
20	30	Global	Right	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.oedema in one of the back muscles	Surgery: C5 to T1 fibrosed	C6 to T1 (one false negative)	C8, T1 (three false negatives)	C8, T1 (three false negatives)
21	29	Global	Left	RTA clavicle fracture	Traumatic avulsion of C6-C8 rootlets. Possible neurotmesis injury at upper left trunk	Surgery: C6-C8 fibrosed	C7, C8 (one false negative)	C6-C8	C7, C8 (one false negative)

Data regarding detection of preganglionic nerve roots. NC: Nerve conduction, RTA: Renal tubular acidosis, SHINKEI: Sheath signal increased with INKed rest-tissue RARE Imaging, STIR TSE: Short-term inversion recovery turbo spin echo, DWIBS: Diffusion weighted imaging with background signal suppression