

Supplementary Data

SUPPLEMENTARY TABLE S1. RAW DATA, HAND MOTOR SCORES OF EACH PATIENT

PATIENT 1	PAS hand					PNS hand							
		before	after	1 month control	during PAS	CHANGE during follow-up	during PAS and follow-up	before	after	1 month control	during PNS	CHANGE during follow-up	during PNS and follow-up
flexor carpi radialis	med						4	5	5	1		1	
flexor digitorum superficialis	med						0	0	1	0	1	1	
flexor digitorum profundus (fingers II-III)	med						0	0	1	0	1	1	
flexor pollicis brevis	med	3	4	5	1	1	1	3	3	2	0	2	
flexor pollicis longus	med	3	4	4	1	0	2	3	3	1	0	1	
opponens pollicis	med	3	4	4	1	0	1	3	1	2	-2	0	
abductor pollicis brevis	med	3	3	3	0	0	0	0	0	0	0	0	
adductor pollicis	uln	4	5	5	1		0	3	2	3	-1	2	
dorsal interossei	uln	0	1	1	1	0	1	0	1	-1	1	0	
abductor digiti minimi	uln	0	3	3	3	0	3	3	3	0	0	0	
palmar interossei	uln	3	4	4	1	0	0	1	1	1	0	1	
flexor digitorum profundus (fingers IV-V)	uln						1	0	1	-1	1	0	
flexor carpi ulnaris	uln						3	4	5	1	1	2	
extensor digitorum	rad						1	1	1	0	0	0	
abductor pollicis longus	rad	4	5	4	1		0	0	0	0	0	0	
extensor pollicis longus	rad	3	4	5	1	1	2	3	3	1	0	1	
extensor pollicis brevis	rad	3	4	5	1	1	2	3	3	2	0	2	
AVERAGE					1.09	0.33				0.71	0.13	0.82	
% PAS of PNS					154	267						155	

(continued)

SUPPLEMENTARY TABLE S1. (CONTINUED)

PATIENT 3	PAS hand				PNS hand							
	before	after	1 month control	during PAS	CHANGE during follow -up	during PAS and follow-up	before	after	1 month control	during PNS	CHANGE during follow -up	during PNS and follow-up
pronator teres and quadratus	med	3	4	4	1	0	1	4	3	3	0	-1
flexor carpi radialis	med	1	1	3	0	2	2	4	4	2	0	-2
flexor digitorum superficialis	med	1	2	2	1	0	1					
flexor digitorum profundus (fingers II-III)	med	1	1	1	0	0	0	4	4	4	0	0
flexor pollicis brevis	med							3	3	3	0	0
opponens pollicis	med							4	4	4	0	0
abductor pollicis brevis	med							4	5	5	1	1
dorsal interossei	uln	0	0	0	0	0	0	1	3	3	2	0
abductor digiti minimi	uln	1	3	2	2	-1	1	4	5	5	1	1
palmar interossei	uln	1	0	0	-1	0	-1	1	3	4	2	1
flexor digitorum profundus (fingers IV-V)	uln	0	1	1	1	0	1	3	4	4	1	0
flexor carpi ulnaris	uln	0	0	3	0	3	3					
extensor digitorum	rad	0	3	2	3	-1	2	1	5	5	4	4
abductor pollicis longus	rad							3	4	4	1	1
extensor pollicis longus	rad							4	3	4	-1	0
extensor pollicis brevis	rad							1	3	4	2	1
extensor carpi ulnaris	rad	0	0	5	0	5	5	3	3	5	0	2
triceps brachii	rad	2	2	2	0	0	0	4	5	5	1	1
posterior deltoid	other	4	5	5	1		1					
infraspinatus and teres minor	other	4	5	5	1		1	4	5	5	1	1
AVERAGE					0.64	0.67	1.21				0.82	0.25
% PAS of PNS					78	267	121					1.00

(continued)

SUPPLEMENTARY TABLE S1. (CONTINUED)

PATIENT 4	PAS hand				PNS hand							
	before	after	1 month control	during PAS	CHANGE during follow-up	during PAS and follow-up	before	after	1 month control	during PNS	CHANGE during follow-up	during PNS and follow-up
pronator teres and quadratus	3	2	3	-1	1	0	1	2	3	1	1	2
flexor carpi radialis	1	3	3	2	0	2	1	3	2	2	-1	1
flexor digitorum superficialis	3	3	3	0	0	0	3	3	2	0	-1	-1
flexor digitorum profundus (fingers II-III)	1	3	4	2	1	3	3	3	3	0	0	0
flexor pollicis brevis	3	3	3	0	0	0	2	3	4	1	1	2
flexor pollicis longus	4	4	4	0	0	0	4	4	4	0	0	0
opponens pollicis	1	3	3	2	0	2	3	2	2	-1	0	-1
abductor pollicis brevis	0	3	3	3	0	3	3	1	1	-2	0	-2
adductor pollicis	0	3	4	3	1	4	3	1	1	-2	0	-2
dorsal interossei	1	2	3	1	1	2	1	2	1	1	-1	0
abductor digiti minimi	2	3	4	1	1	2	2	3	3	1	0	1
palmar interossei	1	1	1	0	0	0	0	1	1	1	0	1
flexor digitorum profundus (fingers IV-V)	1	1	1	0	0	0	3	1	0	-2	-1	-3
flexor carpi ulnaris	1	2	1	1	-1	0	1	2	1	1	-1	0
extensor digitorum	1	0	0	-1	0	-1	0	1	1	1	0	1
abductor pollicis longus	4	3	4	-1	1	0	3	1	2	-2	1	-1
extensor pollicis longus	3	4	4	1	0	1	3	3	3	0	0	0
extensor pollicis brevis	3	4	4	1	0	1	3	3	3	0	0	0
extensor carpi radialis	2	3	4	1	1	2	1	3	3	2	0	2
extensor carpi ulnaris	2	1	1	-1	0	-1	1	3	1	2	-2	0
brachioradialis	3	1	1	-2	0	-2	2	1	1	-1	0	-1
supinator and biceps brachii (supination)	3	2	3	-1	1	0	1	2	3	1	1	2
triceps brachii	1	1	1	0	0	0	0	2	3	2	1	3
serratus anterior	4	1	3	-3	2	-1	4	1	3	-3	2	-1
anterior deltoid and supraspinatus	1	1	0	0	-1	-1	0	1	0	1	-1	0
middle deltoid and supraspinatus	1	1	1	0	0	0	1	3	1	2	-2	0
posterior deltoid	4	1	1	-3	0	-3	1	3	1	2	-2	0
infraspinatus and teres minor	1	1	1	0	0	0	0	2	1	2	-1	1
biceps and brachialis	3	1	3	-2	2	0	2	1	3	-1	2	1
trapezius lower	2	4	1	2	-3	-1	2	4	2	2	-2	0
rhomboids	4	5	5	1	1	1	4	5	5	1	1	1
AVERAGE				0.19	0.23	0.42				0.39	-0.2	0.19
% PAS of PNS				50	215	217						

(continued)

SUPPLEMENTARY TABLE S1. (CONTINUED)

PATIENT 5	PAS hand				PNS hand								
	before	after	1 month control	during PAS	CHANGE during follow-up	during PAS and follow-up	before	after	1 month control	during PNS	CHANGE during follow-up	during PNS and follow-up	
pronator teres and quadratus	med	1	2	4	1	2	3	3	4	3	1	-1	0
flexor carpi radialis	med	0	0	0	0	0	0	0	1	2	1	1	2
flexor digitorum superficialis	med	1	1	1	0	0	0	1	1	1	0	0	0
flexor digitorum profundus (fingers II-III)	med	1	1	1	0	0	0	1	1	1	0	0	0
flexor pollicis brevis	med	1	1	1	0	0	0	0	0	1	0	1	1
flexor pollicis longus	med	1	1	2	0	1	1	1	3	2	2	-1	1
opponens pollicis	med	1	2	2	1	0	1	0	0	1	0	1	1
abductor pollicis brevis	med	1	0	1	-1	1	0	0	0	0	0	0	0
adductor pollicis	uln	1	2	4	1	2	3	1	2	4	1	2	3
dorsal interossei	uln	0	0	0	0	0	0	0	1	1	1	0	1
abductor digiti minimi	uln	2	2	1	0	-1	-1	2	3	3	1	0	1
palmar interossei	uln	0	0	0	0	0	0	0	1	2	1	1	2
flexor digitorum profundus (fingers IV-V)	uln	1	1	1	0	0	0	1	1	1	0	0	0
flexor carpi ulnaris	uln	0	0	0	0	0	0	0	0	2	0	2	2
extensor digitorum	rad	0	0	0	0	0	0	0	0	0	0	0	0
abductor pollicis longus	rad	1	1	2	0	1	1	0	0	1	0	1	1
extensor pollicis longus	rad	1	3	4	2	1	3	0	3	2	3	-1	2
extensor pollicis brevis	rad	2	2	4	0	2	2	0	1	2	1	1	2
extensor carpi radialis	rad	3	4	3	1	-1	0	0	1	0	1	-1	0
extensor carpi ulnaris	rad	0	1	2	1	1	2	0	0	0	0	0	0
supinator and biceps brachii (supination)	rad	2	5	3	3	1	1	3	4	2	1	-2	-1
triceps brachii	rad	1	1	2	0	1	1	1	0	1	-1	1	0
serratus anterior	other	1	5	5	4		4	2	1	5	-1	4	3
anterior deltoid and supraspinatus	other	2	3	4	1	1	2	2	1	1	-1	0	-1
middle deltoid and supraspinatus	other	4	4	4	0	0	0	4	4	4	0	0	0
posterior deltoid	other							3	4	3	1	-1	0
infraspinatus and teres minor	other	2	4	3	2	-1	1	0	1	1	1	0	1
trapezius lower	other	1	2	1	1	-1	0	2	1	1	-1	0	-1
trapez. middle & rhomb	other	4	5	5	1	1	1	4	5	5	1	1	1
rhomboids	other	4	5	5	1	1	1	4	5	5	1	1	1
AVERAGE					0.66	0.36	0.9				0.47	0.29	0.73
% PAS of PNS					140	126	122						

1: palpable or visible contraction; 2: active movement, full range of motion with gravity eliminated; 3: same as 2 against gravity; 4: same as 3 and moderate resistance in a muscle-specific position; 5: same as 3 and sufficient resistance to be considered normal
 med, median; PAS, paired associative stimulation; PNS, peripheral nerve stimulation; rad, radial; uln, ulnar.