

– Abstract –

## The Effects of the Decompression CT Release of Severe Carpal Tunnel Syndrome

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**Objectives** : Surgical decompression of carpal tunnel syndrome(CTS) is generally efficacious. However, the prognosis of carpal tunnel release in patients with severe degree of CTS is uncertain. The purpose of this study was to determine the effect of surgical decompression in the management of severe carpal tunnel syndrome. A prospective study was performed on 16 hands in 11 patients with  $4.7 \pm 2.0$  years duration of symptoms .

**Methods** : All hands were treated with surgical decompression of the transverse carpal ligament. All hands had characteristic symptoms of CTS and absent median sensory nerve action potentials with delayed motor distal latency. On electrodiagnosis postoperative follow-up averaged  $3.8 \pm 2.0$  months.

**Results** : Clinical improvement was obtained in all hands by Visual Analogue Scale scores of tingling sensation, from  $8.8 \pm 1.5$  to  $1.1 \pm 1.3$ . And The median sensory potentials were evoked 81.3%(13 hands out of 16 hands) after decompression, even if with delayed latencies and low amplitudes. Also much improvement of physical signs were observed in 80.0% of patients with positive Tinnel's sign and 83.3% with Phalen's test.

**Conclusion** : These results indicate that carpal tunnel decompression is of benefit to patients with severe degree of carpal tunnel syndrome.

**Key Words** : Severe degree, Carpal tunnel syndrome, Surgical decompression, Absent sensory nerve action potentials

6.8%,

0.6%

2

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1.3

가 가

4.7

가 63, 81 가 18  
 $52.6 \pm 8.9$  (29~76 )  
 11, 12, 58  
 11 16

51.2 ± 6.5, 가 4.7  
 $\pm 2.0$  (1~8 )  
 $3.8 \pm 2.0$  (1~7 )

16  
 25%

82, 1.1 0.9

.81  
 4, 5 )  
 Viking IV

11 ( 2, (p>0.05, paired t-test),  
 Nicolet 8.8 1.1  
 가 (p<0.01, paired t-test)(Table 1). Tinnel  
 10 2, Phalen  
 12 2  
 가 (p<0.01, Pear-  
 son's chi-square test).

가 4.0msec, 3.3msec  
 3.8msec, 가

3 Nolan 6 가 2, 가 1  
 가 가, .14  $6.39 \pm 1.99$  msec  
 가 5.13 ± 1.13msec (p<0.05),  
 .(p>0.05)(Table 2).

2, 16  
 가, 13 (81.3%)  
 5.13 ±

(VAS)  
 Tinnel Phalen  
 0.52msec,  $13.78 \pm 1.77$ uV,  
 $26.78 \pm 5.17$ m/s (Table 3).

8cm

14cm, 가

3 가 가  
 가 가  
 1.7-9 Gelberman 1% triamcinolone 3  
 6



			11
16			
1.	16		
	8.8		
2.	16		
	가	13 (81.3 %)	
3.			
5.	$13 \pm 0.52\text{msec}$ ,	$13.78 \pm 1.77\text{uV}$ ,	
	$26.78 \pm 5.17\text{m/s}$		
4.	Tinnel	10	2
	, Phalen	12	
2			

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