

## The comparison between the wrists verses palm methyprednisolone injection for treatment of carpal tunnel syndrome

### Abstract

**Background&Objective:** Carpal tunnel syndrome is the most common entrapment neuropathy which causes smuch morbidity for patients. Corticosteroid injection is a conventional way to treat CTS. This study was done to compare the wrists verses palm methyprednisolone injection for treatment of carpal tunnel syndrome.

**Materials&Methods:** In a prospective and double blind study, 64 patients who had mild to moderate CTS based on clinical and electerophysiological findings were classified into two groups, the first group received traditional injection technique, the injection site is on the volar wrist surface just proximal to the distal wrist crease between the palmaris longus and flexor carpi radialis tendons. But the second group was injected by new technique. The injection site is about midpalmar area. The patients were followed for one month.

**Results:** Mean rise in nerve conduction velocity (NCV) was 4.00 m/s and 12.03 in the first (wrists method) and second (palm method) groups. Pain score based on visual analog scale decreased 2 sacle unit in both groups similarly.

**Conclusion:** We found 3 times increased at sensory nerve conduction velocity compare to traditional method. This new injection method had better effect on sensory nerve conduction velocity compared to old one so it seems that it can be an alternative way for treatment of CTS.

**Key Words:** Carpal tunnel syndrome- Corticosteroid injection - Visual analog scale (VAS) - Palmaris longus- Flexor carpi radialis

**Hadian-Fard MJ (PhD)**

*Department of Medical Physics and  
rehabilitation  
Shiraz University of Medical Sciences*

**Hesariyan M (MSc)**

*Department of Medical Physics and  
rehabilitation  
Shiraz University of Medical Sciences*

**Corresponding Author:**

*Hadian-Fard MJ (PhD)*

**E-mail:**

*hadianj@sums.ac.ir*