Athletes of all types exert excessive forces on the musculoskeletal system in a repetitive fashion. During the athletic endeavors, the nervous system that supplies these muscles can be injured from either direct trauma or repetitive stress. The upper extremity is particularly vulnerable because of its highly mobile state.

Ulnar neuropathy at the wrist, sometimes referred to as handlebar or «Cyclist’s» palsy, often can be seen in athletes that place repetitive loads on the palmar aspect of the wrist. The ulnar nerve at the wrist is vulnerable to compression injuries because of its superficial location and sparse soft tissue coverage. (1)

We propose a series of seven patients with ulnar motor branch entrapment (Type II according to the Shea and McClain Classification) at the Guyon’s canal related to alpine skiing practice.

All the patients were suffering weakness of interossei, 3rd and 4th lumbricals, adductor pollicis and abductor digiti minimi secondary to the deep motor branch of the ulnar nerve entrapment. Four men and three women, with average age 45 years (28-62) have been evaluated after intense and repeated sport activity. All the patients underwent physical examination of the peripheral entrapment (Froment, Pitres Testut, Wartemberg sign) (2) before imaging (X-Rays, US scan) (3) and EMG and Nerve Conduction Studies. (4)

Conservative treatment have been proposed by resting and activity avoidance combined with splinting regimen and NSAIDs to decrease inflammation and pain. All the patients demonstrated improvement in 6 weeks of treatment and surgical revision of the Guyon’s canal wasn’t required.

Conclusion: ulnar motor branch entrapment is a rare but possible PNS injury in alpine skiing owing likely to repeated ulnar deviation of the wrist related to the extrinsic load of the ski pole in the traction phase. (5)