### conferenceseries.com

**International Conference and Expo on** 

# Musculoskeletal Disease and Regeneration

May 05-06, 2016 Chicago, USA



## Conor P O Brien

Royal College of Surgeons, Republic of Ireland

### Tarsal Tunnel Syndrome, a new way of diagnosing an old problem

Poot and lower limb sensory alteration has confounded clinicians for centuries. In the case of lower limb sensory alteration spine MRI imaging is frequently ordered and a diagnosis of the symptoms are based only on these images, when the current state of the art has confirmed that spine MRI will result in false positive findings in over 50% of cases. Electrodiagnostic evaluation of the lower limb should be the initial diagnostic test performed in assessing these cases due to the low incidence of false positive and the ability to detect radiculopathies , peripheral neuropathies and focal neuropathies. Tarsal Tunnel Syndrome (TTS) is the most common lower limb neuropathy. Currently the pickup rate is poor and reported at only 0.55% of symptomatic individuals. This is in comparison to the upper limb Carpal Tunnel Syndrome , which can affect over 5% of the population . The failure of detection of TTS is due to a failure to perform a thorough standardized evaluation of this neuropathy. The author presents the findings of a 12 parameter electrodiagnostic evaluation of TTS, using both NCS and needle EMG , which take into account the significant variation of the Tibial nerve anatomy at the level of the Tarsal Tunnel. This new protocol has resulted in an increase in the diagnostic yield to just over 3%. The accurate localization of the entrapment also assists in targeted injection therapy using both EMG and Ultrasound guidance

#### **Biography**

Conor P O Brien is a medical graduate of RCSI. He was a founding fellow of the Faculty of Sports & Exercise medicine and has served as Vice-Dean. He is currently a board member. He practices in Clinical Neurophysiology and Sports Medicine at Sports Surgery Clinic, Dublin. He was Irish Olympic Team Doctor, Chairman of the Irish Sports Council Anti-Doping Committee and a member of WADA. He has written on peripheral nerve disease and drugs in sport and currently Chairman of the Anti-Doping Committee at RCSI.

drcob50@gmail.com

**Notes:**