

HIGH DOSE INTRAVENOUS IMMUNOGLOBULIN IS EFFECTIVE IN PAINFUL DIABETIC POLYNEUROPATHY RESISTANT TO CONVENTIONAL TREATMENTS: RESULTS OF A DOUBLE BLIND, RANDOMIZED, PLACEBO-CONTROLLED, MULTICENTER TRIAL

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The objective of this study was to assess the efficacy and safety of high dose intravenous immunoglobulin (IVIg) as pain therapy in treatment resistant diabetic painful polyneuropathy. Diabetic neuropathic pain is a daily challenge because pain relief is still unsatisfactory. Our incomplete understanding of the pathophysiology of diabetic neuropathic pain is the main reason why its treatment still represents an unmet need. The contribution of the immune system to the peripheral and central sensitization is emerging as a new concept and overexpression of proinflammatory cytokines is involved in the pathogenesis of neuropathic pain. This is a randomized, double blind, placebo-controlled, multicenter trial, involving diabetic patients with a painful polyneuropathy resistant to antidepressants and antiepileptic drugs alone or in combination and who reported baseline severity of pain more than 60 units (mm) on a VAS scale at enrollment. 26 diabetic patients with a painful polyneuropathy according to the Toronto Diabetic Neuropathy Expert Group and resistant to conventional therapies were enrolled and followed-up for 12 weeks. Eleven patients in the IVIg arm and 12 patients in the placebo arm completed the study. There were no significant differences concerning age, sex and pain severity. The mean value of pain intensity in the IVIg group dropped from 87.3 mm at baseline to 48.4 at the end of the first week and to 47.5 after 4 weeks, while in the placebo group changed from 92.9 to 75.8 after one week and to 85.8 after 4 weeks ($p=0.0001$). At the end of the study pain severity in patients in the IVIg arm was 54.1 while in the placebo arm was 86.7 ($p=0.001$). The mean Neuropathic Pain Symptom Inventory (NPSI) total score in the IVIg group dropped from 86 at baseline to 50 after one week and to 40 after 4 weeks while in the placebo group changed from 89 to 80 and then to 86 ($p=0.000001$ comparing baseline and the fourth week in the 2 groups). The therapy was well tolerated without significant side effects along the follow up. The present study confirms previous data concerning significant pain relief with IVIg in diabetic patients with a painful neuropathy resistant to conventional treatments.

DYSPHONIA AS UNUSUAL PRESENTATION OF PARSONAGE TURNER DISEASE

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We describe a case of a 38-year-old man with left vocal cord palsy. A recurrent laryngeal nerve lesion was suspected but chest and neck imaging excluded any cause of nerve compression or infiltration. When, after about one month, he presented left shoulder pain followed by weakness and atrophy of supraspinatus, infraspinatus and deltoid muscle, a diagnosis of Parsonage-Turner syndrome with involvement of the superior components of the brachial plexus and the recurrent laryngeal nerve was made. Parsonage Turner Syndrome, also known as Neuralgic Amyotrophy, usually presents with sudden onset shoulder pain together with upper limb muscle weakness and atrophy. When it involves nerves outside of the brachial plexus region, it is called Extended Neuralgic Amyotrophy: cases have been described involving phrenic, facial, hypoglossus, or intercostals nerves and, very rarely, the recurrent laryngeal nerve. When biphasic presentation occurs, as in our case, the diagnosis can be trickier.

CONTRIBUTION OF ULTRASOUND AND CLINICAL NEUROPHYSIOLOGY IN 119 ENTRAPMENT, POST-TRAUMATIC/POST-SURGICAL NEUROPATHIES AND TUMORS

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The objective of this study was to evaluate the role of ultrasound in the pre-operative work-up of peripheral nerve lesions. 119 entrapment, tumoral, post-traumatic or post-surgical nerve injuries in patient candidates to surgery were retrospectively analyzed. For all patients, the evaluation included clinical examination, electrodiagnostic studies (nerve conduction study and electromyography) and ultrasound nerve study. Ultrasound confirmed electrodiagnostic findings in 36.1% of cases, and showed a contributive role in the diagnosis and surgical strategy in 53.8% of all cases; only in 10.1% of the patients, ultrasound examination was negative. In 16% of cases, ultrasound was not only contributive, but had a key diagnostic role in the presence of doubtful electrodiagnostic findings. The contributive role was different according to etiology, being higher for tumors (100%) and for post-traumatic or post-surgical neuropathies (72.2%) than for entrapment neuropathies (43.8%). Ultrasound allows to directly visualize the cause and extent of nerve lesion and finds its place between electrodiagnostic tests and exploratory surgery. It can be used to complement a doubtful electrodiagnostic test providing invaluable information such as the presence and extent of a mass, scar compression or neuromas.