J Neurol Neurophysiol 2017, 8:4(Suppl)
DOI: 10.4172/2155-9562-C1-053

Spinal cord stimulator implantation for idiopathic peripheral neuropathy

Alaa A Abd-Elsayed
University of Wisconsin, USA

Introduction: Peripheral neuropathy results from damage to the peripheral nervous system with symptoms ranging in severity from numbness, paresthesias, and allodynia to muscle weakness, paralysis, and organ dysfunction. Approximately 20-30% of cases reported emerge idiopathically without identifiable risk factors. Pain is usually resistant to conservative management. We present a unique case of idiopathic peripheral neuropathy alleviated with spinal cord stimulator placement.

Case Description: A 71 year-old male with lumbar facet hypertrophy (as evidenced on MRI at L4-5, L5-S1), lumbago, and idiopathic peripheral neuropathy presented to pain clinic. Patient had normal physical exam including strength, sensation, reflexes, and gait with exception of positive bilateral straight leg raise at 90 degrees and tenderness to direct palpation over lumbar spine. Patient had lumbar epidural steroid injection previously without relief in symptoms. Following discussion of risk and benefits, patient opted for trial placement of spinal cord stimulator placement (SCS). Patient reported relief with SCS trial and decision was made for permanent SCS placement for long term pain control. We then placed two permanent octad leads bilaterally at the level of T8-9. Patient tolerated procedure well and was taken to the recovery room before going home that same day. At 3-month follow-up visits, patient continued to report 90% symptom relief with ability to increase activity and wean off of oral tramadol and gabapentin medications.

Discussion: Our case adds to the growing body of literature illustrating the role of SCS in treating refractory pain caused by peripheral neuropathy from a variety of causes the mechanism of which is still being investigated.

alaaawny@hotmail.com

Atherosclerosis, serum hepcidin concentrations and early cognitive function upset – preliminary study

Victor Manolov, Savina Hadjidekova, Julia Petrova, Vasil Vasilev, Maria Petrova, Yavor Jelev, Todor Kunchev, Petar Jeliazkov, Kamen Tzatchev and **Latchezar Traykov**
Medical University in Sofia, Bulgaria

Hepcidin leads to the deposition of iron in macrophages in atherosclerotic plaques by an increase in lipid peroxidation and progression of foam cells, which leads to the risk of atherosclerosis. Mini-Mental State Examination (MMSE) and Isaak's test are sensitive ways for early cognitive function evaluation. 23 patients [10 females (43.5%)] with suspected atherosclerosis were included. They were clinically and neurologically reviewed, EMG; IMT and ABI were measured. They were evaluated for routine biochemical parameters, and additional serum hepcidin were quantified. AAS, nephelometric, ELISA and statistical methods were used during analyzes and obtained results interpretation. All results were compared to age and gender matched healthy controls. We found statistically significant elevated serum hepcidin in patients suspected for atherosclerosis (52.9±3.9 μg/L) compared to healthy controls (21.6±3.4 μg/L); $P<0.001$. Patients suspected for atherosclerosis showed deviations of Mini-Mental State Examination (MMSE) and Isaak's test, which correlates to increased hepcidin concentration. Our findings suggest serum hepcidin quantification as a marker for iron deposition in suspected atherosclerosis and early diagnosis of atherosclerotic changes.

victhedoc3@mail.bg