노인재활

게시일시 및 장소 : 10 월 19 일(토) 08:30-12:30 Room G(3F)

질의응답 일시 및 장소 : 10 월 19 일(토) 11:00-11:30 Room G(3F)

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Rehabilitative Therapy on Concomitance of Diabetic Neuropathic Cachexia and Amyotrophy: Case Report

Hyo Sik Park[1*], Jong Keun Kim[1], Jin Seok Bae[1], Yong Sung Jeong[1], Jong Youb Lim[1], DaWa Jung[1], Kang Jae Jung[1†]

Eulji University Hospital, Department of Rehabilitation Medicine[1]

Introduction

Diabetic neuropathic cachexia (DNC) and amyotrophy (DNA) is a very rare peripheral neuropathy associated with diabetes mellitus (DM). DNC is distinguished by the extreme loss of body weight and severe neuralgia. DNA is characterized by severe pain and followed by weakness of proximal lower extremities. We report a rehabilitative therapeutic intervention and management on the patient with concomitant DNC and DNA.

Case report

A 56-year-old-man admitted to the department of rehabilitation medicine to manage quadriparesis. The patient was diagnosed with type 2 DM about 10 years ago. Although he had been prescribed medications for DM, glucose level was not well controlled. He suffered severe neuropathic pain in both legs and lost his weight about 20 kg. From the summer of 2018, he felt muscle weakness and had difficulty in walking, climbing and descending stairs. Gradual progression over the next several months resulted in asymmetric and severe quadriparesis. On physical examination, apparent muscle atrophy was detected on proximal muscles. Based on the evaluation of medical research council scale, muscle strength of both upper extremities was 2/5 in the proximal, and 3/5 in the distal muscle groups, and that of both lower extremities was 4/5 in the proximal, and 3/5 in the distal muscle groups. Glove-stocking type hypoesthesia was present, and impaired proprioception and agraphia were present. Bilateral biceps brachii, brachioradialis, triceps, patella, and Achilles reflexes could not be elicited. Any pathologic reflexes were not detected. On electrophysiologic studies, sensory nerve action potential (SNAP) of the bilateral superficial peroneal and sural, and right median and ulnar nerves could not be elicited. The SNAP of the left median and ulnar nerves showed prolonged distal latency and decreased amplitude. Compound muscle action potential (CMAP) of the bilateral common peroneal and left tibial nerves could not be elicited. Distal latency of CMAP of the bilateral median and ulnar and right tibial nerves was prolonged. We offered an 18-week rehabilitation program which consisted of the application of infrared therapy, transcutaneous electrical nerve stimulation, electrical stimulation therapy, stretching, range of motion exercise, and strengthening isometric exercise. He had been taking

pregabalin 300 mg three times a day, duloxetine 60 mg once a day, thioctic acid 600 mg once a day, and tramadol 100 mg two times a day. Gradually, his pain regressed. However, reflexes of the bilateral upper and lower extremities could not be triggered, and muscle strength did not improve significantly. He gains 3 kg weight, and BMI was 18.6 kg/cm2.

Conclusion

DNC and DNA are very rare entities among DM patients, and the simultaneous occurrence of these two was reported rarely. In this case, diabetic amyotrophy progressed. Physicians should consider these rare complications of DM showing characteristics different from other types of neuropathies.