신경근육재활 및 전기진단

게시일시 및 장소 : 10 월 18 일(금) 08:30-12:20 Room G(3F)

질의응답 일시 및 장소 : 10 월 18 일(금) 10:20-10:24 Room G(3F)

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Acute Myeloradiculitis associated with Unilateral limb weakness: A Case Report

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Introduction

It is known that myelitis or myeloradiculitis should often come with viral infection of the nervous system, presenting paraplegia. In this report we present a young age patient with unilateral leg weakness without any history of infection or trauma.

Clinical presentation

A 19-year-old man presented to our electrodiagnosis unit while he was registered on Pediatrics department in May 2019. He complained of sudden onset right leg weakness for 3 weeks. He was previously diagnosed with DLBCL at age 16 and confirmed complete remission 2 and a half years ago. His weakness started 3 weeks ago while he was shopping in a franchise market. His right leg showed sudden weakness while he was walking beside a display stand, without any history of trauma situation. Enhanced Brain MRI showed no focal lesion in brain parenchyma, which was not intracranial hemorrhage or infarction.(Fig.1) With no abnormal findings in Brain MRI, this patient was consulted to our electrodiagnosis unit. Neurologic examination showed no abnormalities on central nervous system. Manual motor function test revealed mild weakness in hip flexor G, knee extensor G, Ankle dorsiflexor F, Great toe dorsiflexor F-, Ankle plantarflexor F. His bot harm and left leg were evaluated as normal. Sensory function was intact with Achilles tendon and Patella tendon hyporeflexia.

Results

The needle electromyography revealed abnormal spontaneous activity in right tibialis anterior, peroneus longus, tensor fascia lata, gastrocnemius, semimembranosus muscles with polyphasic motor unit action potential(MUAP) of tibialis anterior muscle, while compound muscle action potentials(CMAPs) and sensory nerve action potentials(SNAPs) findings of nerve conduction study in peroneal and tibial nerves were normal. Consequently Enhancement L spine MRI was conducted to confirm no evidence of compressive polyradiculopathy. Gadolinum contrast revealed diffuse enhancement of the cauda equina.(Fig. 2) Laboratory examinations including viral markers were conducted to show most of their results came out negative while EBV EBNA IgM(EIA) turned out

equivocal. Cerebrospinal fluid(CSF) study was also examined, which is IgG 27.82mg/dL, Albumin 252.82 mg/dL, WBC 130/uL, total Protein 248.0mg/dL. As final diagnosis was myeloradiculitis, patient started on steroid pulse therapy(Methylprednisolone 1000mg/day) for 5 days and discharged with Solondo medication for a month. He fully recovered from weakness on one month follow up.

Discussion

This case was suspicious of polyradiculopathy at first because his weakness was only limited on right leg and our electrodiagnostic study shows acute denervation potential with spared SNAP. But considering his age and no history of trauma, we performed Enhanced L spine MRI and found myeloradiculitis. Even patient with unilateral weakness and no other history of infection, those myelitis or myeloradiculitis should not be excluded especially in pediatric cases.

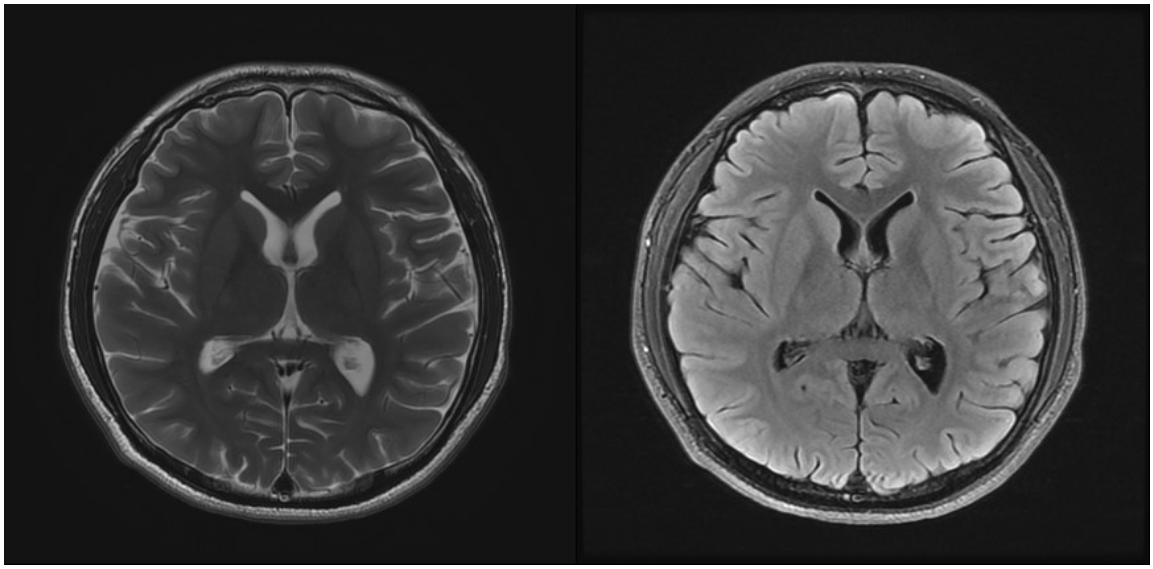

fig. 1 Axial T2 and FLAIR Brain MRI shows no evidence of stroke.

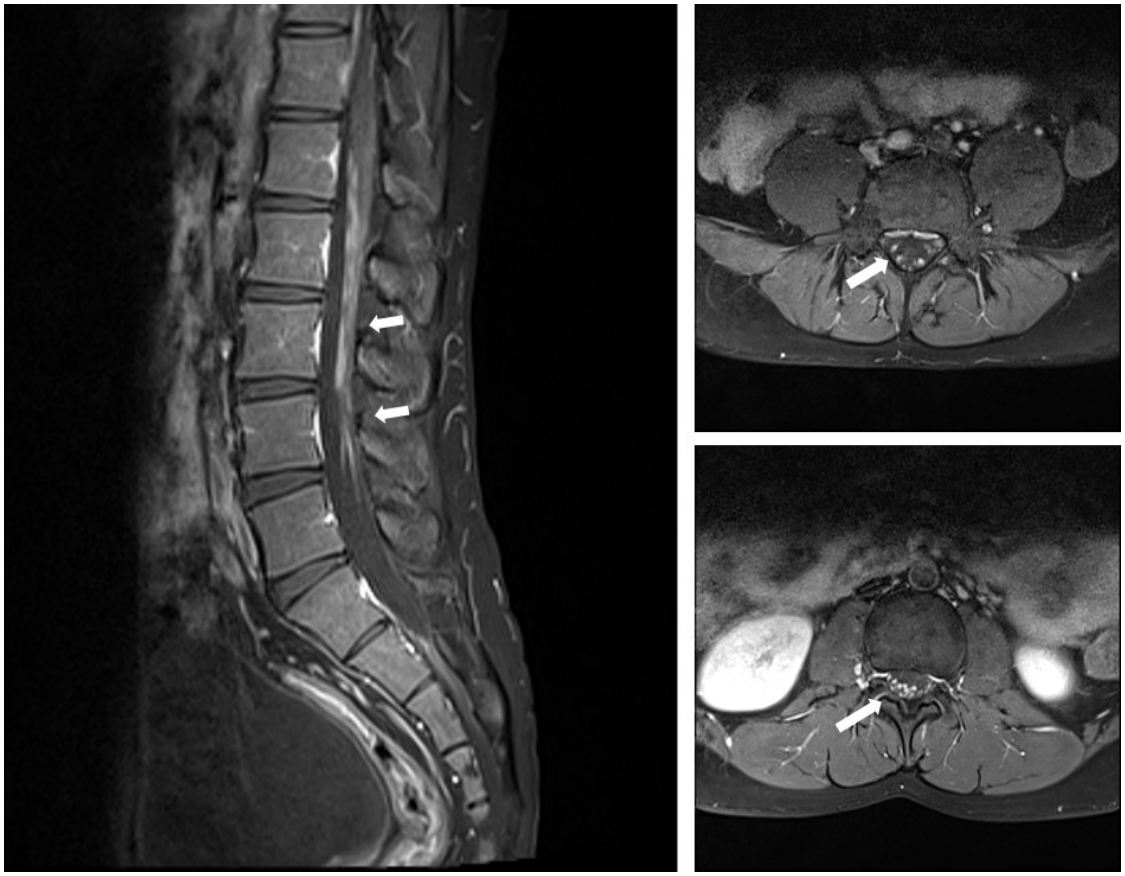

fig. 2 L spine MRI shows diffuse enhancement in nerve roots(white arrows).