

소아재활

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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Isolated Achilles Tendon Shortening Associated Periventricular Leukomalacia: 3 cases

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Introduction

Periventricular leukomalacia(PVL) is a well-known cause of cerebral palsy, spastic diplegia or quadriplegia. We experienced isolated Achilles tendon shortening cases with brain MR image suspicious periventricular leukomalacia.

Case 1

A 21-year-old male suffered from short Achilles tendon to the orthopedic surgery department. He showed increased tone at both ankles, thus referred to the Rehabilitation Department. His ankle dorsiflexion showed 10/5 degree with knee flexion and 0/-5 degree with knee extension. His brain MR showed wall irregularity of left lateral ventricle dorsal horn with mild thinning of adjacent white matter, suggested PVL. (Figure 1)

Case 2

A 13-year-old boy complaint tip-toe walking pattern. His range of ankle dorsiflexion showed 10/0 degree with knee flexion and -20/-30 with knee extension. He could not maintain to touch heels to the ground at standing position. His brain MR showed asymmetry of lateral ventricle dorsal horns with mild thinning of adjacent white matter, suggested PVL. (Figure 2)

Case 3

A 5-year-old boy came to the clinic because of intermittent tip-toe gait. His ankles showed dorsiflexion limitation of 5/5 degree with knee flexion and -5/-5 degree with knee extension. Intermittently he showed excessive intentional pes valgus to decrease tip-toe gait. His brain MR images showed minimal cystic PVL at white matter around the lateral ventricle dorsal horn. He showed no other neurologic abnormality. (Figure 3)

Conclusion

PVL is a common cause of cerebral palsy. However, isolated Achilles tendon shortening might be mistaken for the musculoskeletal problem, not a neurologic disorder. In our cases, a very mild type of PVL may be elicited as isolated ankle limitation of motion.

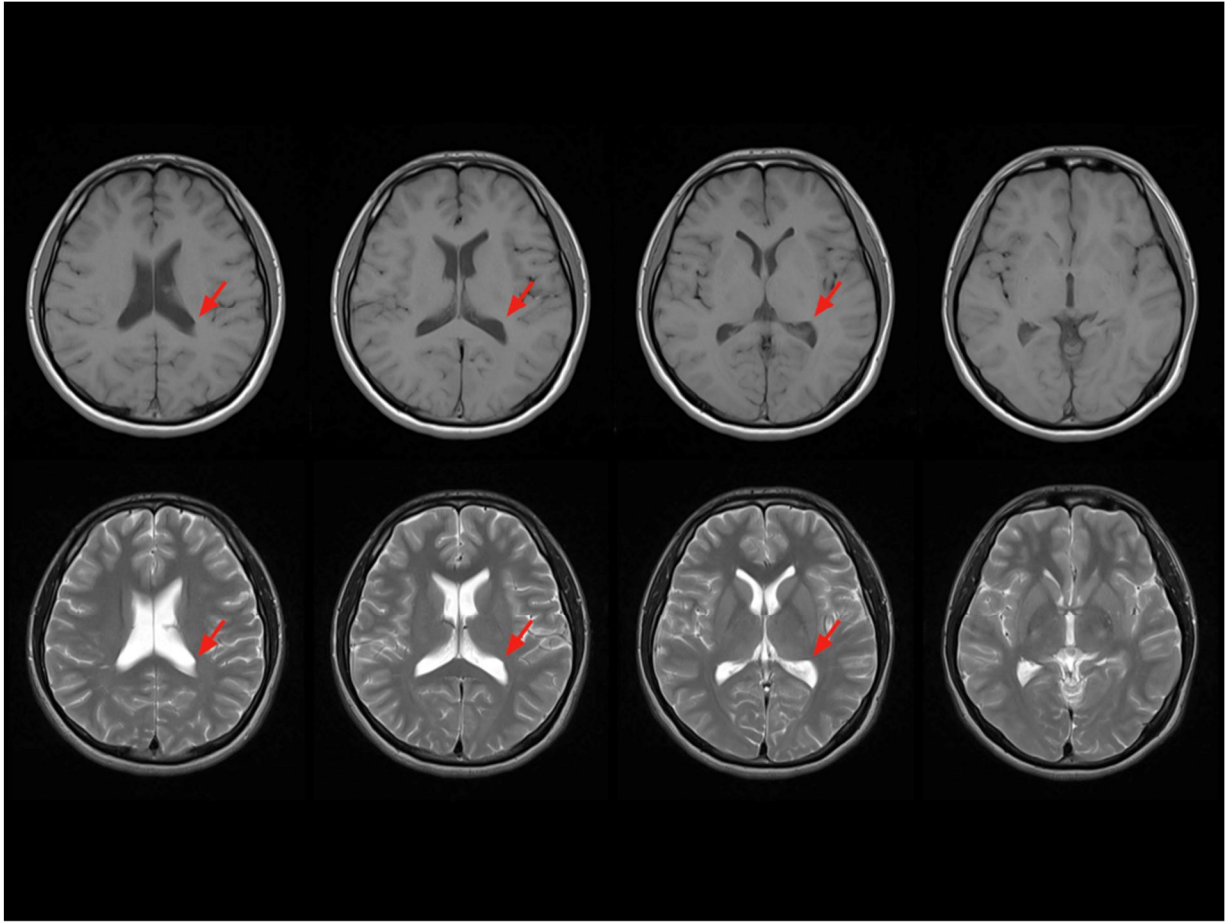


Figure.1 Brain MR images - Red arrow indicates suggested PVL area

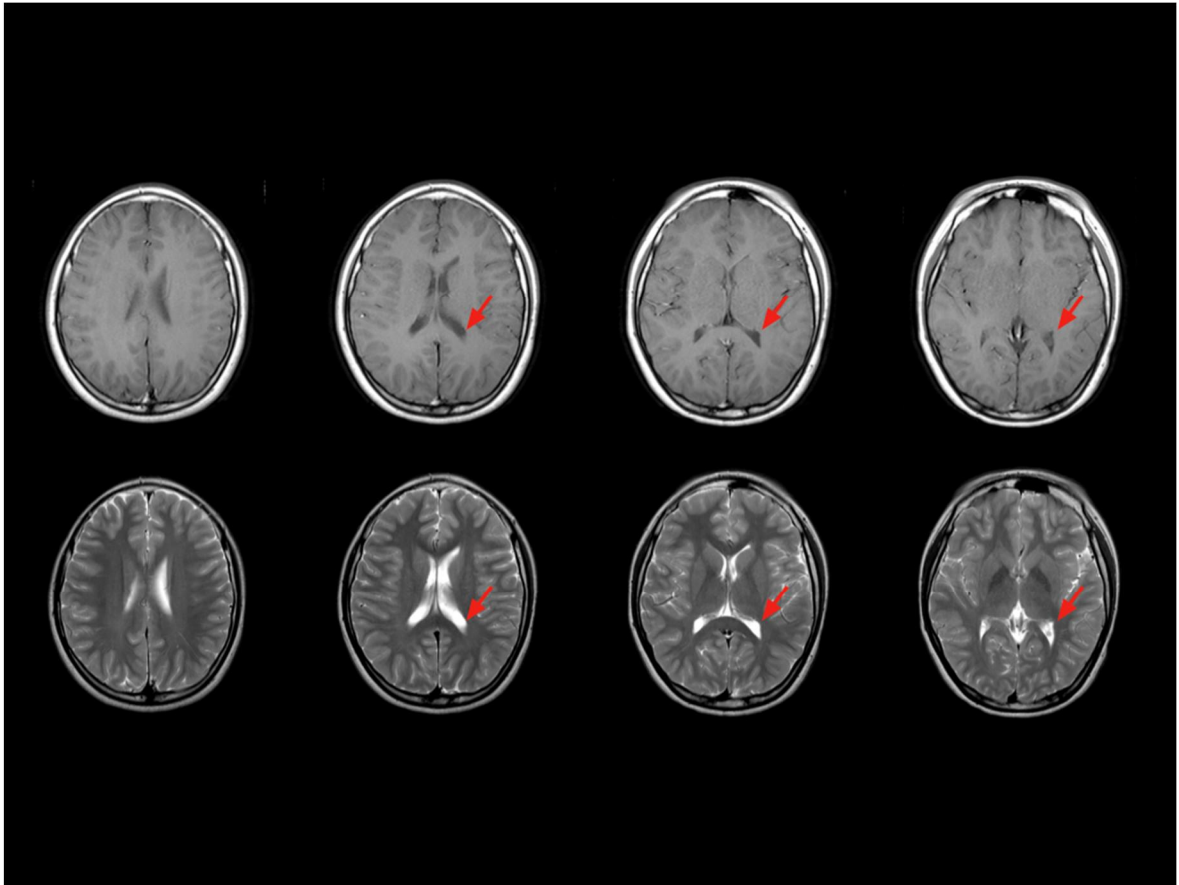


Figure. 2 Brain MR images - Red arrow indicates suggested PVL area

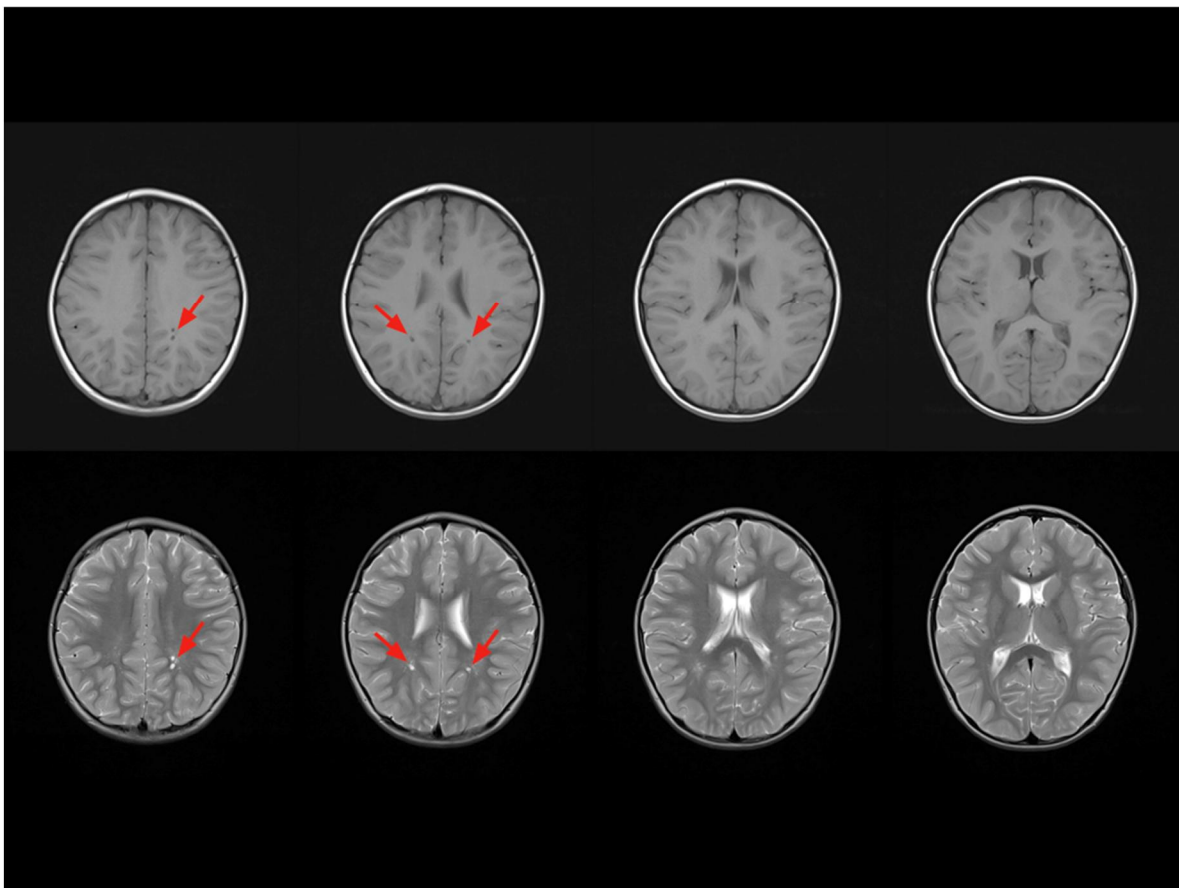


Figure. 3 Brain MR images - Red arrow indicates suggested cystic PVL