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A CASE OF MILLER FISHER SYNDROME WITH MRI ABNORMALITIES

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ABSTRACT

In this paper a case of Miller Fisher syndrome is presented characterized by ophtalmoplegia, severe ataxia and tendon areflexia that showed central demyelination on MRI

Key Words: *Miller Fisher syndrome, MRI*

Miller Fisher syndrome is considered to be a variant of acute inflammatory polyneuropathy or Guuillan Barré syndrome (1). It is characterized by total external ophtalmoplegia, severe ataxia and tendon areflexia (1,2). Results from Magnetic Rezonans Imaging (MRI) are generally normal. The cases with MRI abnormalities seems to be a very rare entity (3,4). Here we reports a case of Miller Fisher syndrome that showed central demyelination on MRI.

CASE REPORT

A 52 year-old female admitted to our clinic because of diplopia, unsteadiness of gait, vertigo and dysarthria. Her complaints had appeared two weeks after an upper respiratory tract infection. Within 25 days her unsteadiness had deteriorated to such a degree that she was unable to walk, although according to the power in her limbs seemed normal. There was no past medical and family history of relevance. On admission, initial physical examination revealed normal cardiovascular and respiratory functions. She had complete urinary retention requiring bladder cathe-

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tarisation.. She was fully alert. There was mild generalised muscle weakness and ataxia. The tone was reduced at upper limbs but was absent at lower limbs. There was no sensory deficit for any modality. She had a complete internal and external ophtalmoplegia and bilateral facial weakness.

Investigations revealed normal complete blood count, plasma electrolytes, serum and urine protein electrophoresis, liver and thyroid functions.

Lumbar puncture produced clear acelluler cerebrospinal fluid (CSF) under normal pressure with protein content of 140 mg/dl. Glucose and chloride concentrations of CSF were normal. No oligoclonal IgG bands were seen on CSF electrophoresis. Electromyograpy of limb muscles exhibited a slightly reduced pattern. Motor and sensory nerve conduction velocities were normal as well as sensory nerve action potentials. Cranial CT with and without contrast gave normal results. MRI showed areas of increased signal in the white matter of the periventriculer region predominantly on the left side (Fig 1).

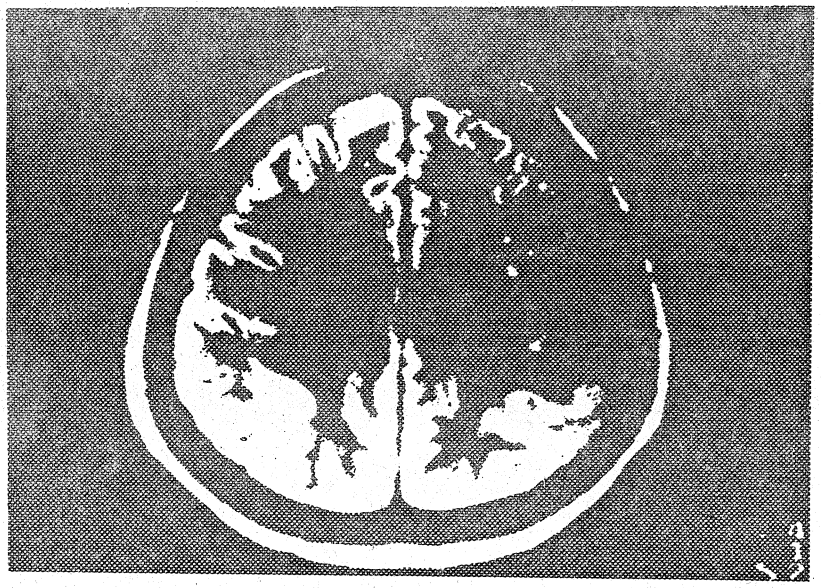

Figure I. MRI shows areas of increased signal in the white matter of the periventriculer region predominantly on the left side (arrows).

DISCUSSION

The clinical features of our patient were similar to the ophthalmoplegia-ataxia-areflexia syndrome reported by Fisher. In Fisher's syndrome, the pathological site of ophtalmoplegia and ataxia remains unclear, but peripheral demyelination seems to be electrophysiologically and pathologically proved (1,5). In a case diagnosed as the Miller Fisher syndrome, Philip et al (6) reported the postmortem findings that included demyelination in the peripheral nerves, spinal roots, and lower cranial nerves, with sparse inflammatory infiltrates. Although in some cases with Fisher's syndrome, reduced nerve conduction velocities have been reported (1), It is very difficult to determine abnormalities of nerve conduction; however relatively minor changes in motor and sensory conduction have been frequently documented (7).

In our case, electroneuromyographic studies revealed no important findings. To our knowledge, only two cases with MRI abnormalities have been reported in the literature (3,4). However the combination of central and peripheral myelinopathy has been reported in acute (8) and chronic (9.10) inflammatory polyneuropathy and in multiple sclerosis (8). Ferrer et al (3) could not differentiate whether central demyelination observed on MRI is related to Fisher's syndrome or multiple sclerosis. Although we could not differentiate these two entites based on MRI findings, we belived that our case is a Miller Fisher syndrome based on the following findings: CSF having acellularity and protein concentration of 140 mg/dl, no oligoclonal IgG band in electrophorezis; lack of remission and exacerbation periots in history; clinical view including ataxia-areflexia-ophtalmoplegia. Moreover, we believe that the same demyelinating disease occured first in the peripheral nervous system and then in the central nervous system.

ÖZET:

MRI BULGUSU OLAN BİR MILLER FİSHER SENDROMU OLGUSU

Bu makalede, MRI'da santral demyelinasyon gösteren oftalmopleji, ataksi ve tendon arefleksisiyle karekterize bir Miller Fisher sendromu olgusu takdim ediliyor.

Anahtar Kelimeler: Miller Fisher sendromu, MRI

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SÜNNETSİZ ÇOCUKLARDA GLANS PENİS VE ÜRETRA MİKROFLORASI

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ÖZET:

Sünnetsiz çocuklardan glans penis ve üretra florasının tespiti amacıyla; Atatürk Üniversitesi Tıp Fakültesi Çocuk Hastalıkları anabilim Dalı'na başvuran 1-12 aylık 33, 1-3 yaş 33 ve 4-6 yaş grubunda 25 olmak üzere toplam 91 çocuktan kültür örnekleri pamuklu ekivyon çöpleriyle alınmış ve beyin-kalp infüsyon'lu buyyona daldırılarak mikrobiyoloji laboratuvarlarına gönderilmiştir. Bakteriyolojik kültürler ise kanlı, EMB ve çikolota agar besiyerlerinde gerçekleştirilmiştir.

Hem glans penis hem üretral kültür örneklerinden en fazla oranda E. coli, proteus spp., koagulaz olumsuz stafilokoklar, difteroid basiller, Neisseria ve koagulaz olumlu stafilokoklar üremiş; bunu Streptococcus pneumoniae, Enterobacter aerogenes, non hemolotik streptokoklar izlemiş; daha az olarak da β- hemolitik streptokoklar, Seratia marsencens, Citrobacter spp., Pseudomonas aeruginosa ve Haemophilus basiller soyutlanmıştır. Yukarıdaki sıraya göre bu mikroorganizmaların glans peniten izolasyon yüzdeleri; % 58.2, %22.0, %20.8, %19.8, %17.6, % 11.0, %11.0, %7.7, % 7.7, %3.3, %2.2, %2.2, % 1.1, %1.1; üretradan ise; % 51.6, % 25.3, % 25.3, % 20.9, % 13.2, % 13.2, % 6.6, % 8.8, % 8.8, % 1.1, % 2.2, % 2.2 olarak bulunmuş, Pseudomonas aeruginosa ve Haemophilus basiller ise bu örneklerden izole edilememiştir.

E. coli, 4-6 yaş grubunda küçük yaş gruplarına oranla daha az; koagulaz olumlu stafilokoklar ise daha fazla oranlarda izole edilmişken, diğer mikroorganizmaların izolasyonlarının, yaş gruplarına göre önemli bir farklılık göstermediği görülmüştür.

GİRİŞ

Anne karnında fetus'un steril olduğu bilinmektedir. Ancak doğum sırasında ve doğumdan sonra gerek anneden ve gerekse alınan çeşitli gıdalarla ve çevreden pek çok mikroorganizma vücuttaki çeşitli organlara yerleşmek suretiyle insanoğ-

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