

HEADACHE; RARE PRESENTATION OF MILLER FISHER SYNDROME

Piotr P. Michaliszyn MD¹, Akram Dastagir MD²

¹ Department of Internal Medicine Residency Aurora Health Care, Milwaukee, WI; ² Department of Neurology, Aurora Health Care, Milwaukee WI

INTRODUCTION

Miller Fisher is a known variant of Guillain Barre Syndrome with a specific triad of ophthalmoplegia, areflexia and ataxia.

CASE PRESENTATION

A 51 year old male initially presented with blurry vision and a severe occipital headache with no papilledema. Patient endorsed having an URI 1-2 weeks prior to symptoms starting. Initial head CT was negative and an LP was done which had an opening pressure of 320 mmHg and otherwise normal. Serum studies were positive for GQ1B antibody. This gave the diagnosis of Miller Fisher Syndrome. IVIG treatment was initiated and

symptoms largely improved including the headache.

DISCUSSION

Severe headache is usually not a symptom of Miller Fisher Syndrome. In a case series including 27 patients with Miller Fisher Syndrome, only two reported a headache. Freidmann & Potts proposed that an increase in CSF protein could lead to outflow obstruction, increasing ICP leading to headaches. However our patient's CSF protein was 45 mg/dl. Another potential explanation could be injury to the ventral and dorsal roots of cranial nerves by antibodies to GD3 and GD1b. Chiba et al, discovered that along with antibodies to GQ1b patients also develop

antibodies to GD3 and GD1b in rare cases. With such a small percentage of patients being positive for the antibodies to GD3 and GD1b, it was theorized that this could be the reason for the headache. Our patient's GD1b antibody was negative and unfortunately did not have GD3 antibody tested.

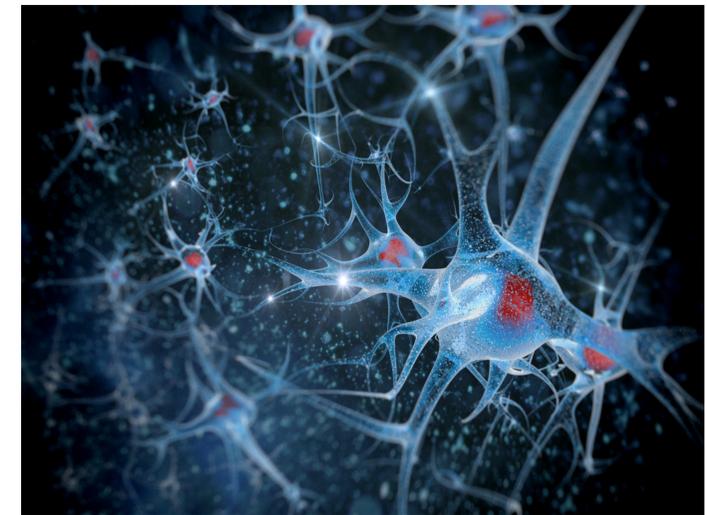
CONCLUSION

Headaches are a rare symptom of Miller Fisher with unknown pathomechanism. More research is needed especially in antibody related nerve damage. Nonetheless physicians need to identify this symptom and know headaches are usually self limiting.

REFERENCES

Chiba A, Kusunoki S, Shimizu T, Kanazawa I. Serum IgG antibody to ganglioside GQ1b is a possible marker of Miller Fisher syndrome. *Annals of Neurology*. 1992; 31: 677-679.

Friedman DI, Potts E. Headache Associated With Miller Fisher Syndrome. *Headache*. 2007; 47.



<http://blogs.discovermagazine.com/d-brief/2018/03/07/brain-neuron-creation-adult/#.W3wyBthKit8>