An Exceedingly Rare Case of Miller Fischer Syndrome after Immunotherapy Treatment for Metastatic Melanoma and the effectiveness of rehabilitation.

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Case Description:

40-year-old female with a past medical history of metastatic melanoma (Stage IIIC) presented with ataxia, diplopia, weakness, and peripheral neuropathy four weeks after the initiation of Ipilimumab/Nivolumab neoadjuvant therapy for metastatic melanoma. Lumbar puncture analysis revealed albuminocytologic dissociation with a protein of 179 mg/dL and absent F wave on EMG which is consistent for demyelination. Treatment included methylprednisolone, plasma exchange therapy, and two separate five-day courses of IVIG. Upon completion of treatment, she was transferred to acute rehab. Her initial physical exam revealed a left cranial nerve three palsy, ataxia, areflexia, hypoesthesia in the lower extremities, and quadriparesis. Most notable was diffuse 1/5 lower extremity strength throughout. After four weeks of inpatient rehab, her strength improved to 5/5 in the upper extremities, and 4/5 in the lower extremities with improvement of ophthalmoplegia and ataxia. Upon discharge, she ambulated over 120 feet using a rolling walker with contact guard assistance.

Discussion:

Miller fisher syndrome (MFS) is only observed in 5% of Guillain- Barré Syndrome (GBS) cases and is characterized by the classic triad of ophthalmoplegia, areflexia, and ataxia. To highlight the scarcity of this case, to date there is only one case report documenting MFS as a consequence of immunotherapy for the treatment of melanoma. Upon further review of literature, only 4 cases of GBS following Ipilimumab/Nivolumab therapy for melanoma have been reported. The most common side effects of these therapies are lethargy, diarrhea, nausea, emesis, pruritis and headaches. In our patient's case she recovered significant mobility, strength and independence following intensive physical and occupational therapy while in acute rehab.

Conclusion:

This case highlights the second presentation of Miller-fisher syndrome following immunotherapy and the first case report demonstrating the improvement that acute rehabilitation can have on a patient's functionality with this particular condition.

References:

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