Disclosure: Dr. Chakales has nothing to disclose. Dr. Herman has nothing to disclose. Dr. Chien has nothing to disclose. Dr. Hutto has nothing to disclose.

Case Review of Alternative Treatment in Patient With Immunotherapy Induced Chronic Inflammatory Demyelinating Polyradiculoneuropathy (CIDP)

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Objective

To emphasize recognition of chronic inflammatory demyelinating polyradiculoneuropathy (CIDP) due to Immune checkpoint inhibitor (ICI) therapy Atezolizumab and efficacy of steroids in treatment.

Background

Atezolizumab is an anti-programmed death-ligand 1 (PD-L1) immunemodulating drug that induces tumor-specific cytotoxic T-cell immunity against the PD-L1 overexpression of many aggressive lung cancers. IVIG was initially thought to have the same benefit in immunotherapy mediated CIDP however recent cases suggest better benefit with plasmapheresis and steroids.

Design/Methods

We report a case of CIDP in a 61-year-old female with high grade neuroendocrine carcinoma of the lung with extensive metastasis. After confirmation of diagnosis, patient began treatment with whole brain radiation therapy and 6 cycles of carboplatin/etoposide followed by atezolizumab maintenance every 21 days for 38 months. Initial treatment reaction included self-resolving loss of balance. Last dose of atezolizumab was given 9 days prior to brain biopsy of left frontal mass. Following biopsy, symptoms of generalized weakness and bilateral lower extremity weakness presented. When symptoms progressed, patient was admitted to hospital, 2-3 weeks after last dose of atezolizumab.

Results

The patient responded to treatment with steroids and cessation of atezolizumab, carboplatin, and etoposide. She recovered to her neurological baseline after a course of IV dexamethasone.

Conclusions

Among ICI therapy, atezolizumab has been less frequently reported with neurologic adverse events than other medications of its class. Increased recognition of the association between ICI and CIDP may improve early detection and improve potentially fatal outcomes. This case and an assessment of the literature indicate ICI induced CIDP may not respond to IVIG and plasmapheresis treatment with consistency. Although IVIG and plasmapheresis maintained efficiency in some reports, adverse outcomes of IVIG treatment may indicate alternative first-line treatment. This case reports successful recovery with the sole use of immunosuppressive therapy which should be considered to optimize future outcomes of ICI associated CIDP.

Disclosure: Miss Huberman has nothing to disclose. Dr. Larinde has nothing to disclose.

Opsoclonus Myoclonus Syndrome and Supraventricular Tachycardia in a Pediatric Patient: A Case Report and Literature Review

Alec Giakas, Sydney Garner, John Korin, Hollie Edwards

Objective

NA.

Background

Opsoclonus myoclonus syndrome (OMS) is a rare movement disorder in children often associated with an underlying neuroblastoma. In other cases, it is believed that the tumor is occult or there is another immune-stimulating precipitating event. Diagnosis can be difficult, requiring 3 of 4 criteria: opsoclonus or ocular flutter, myoclonus or ataxia, behavioral or sleep disturbances, and neuroblastoma. Prompt treatment of OMS is crucial to preventing permanent neurologic sequelae. In order to better characterize the clinical profile of this syndrome and its associated conditions, we present a case report of a 9 month old male with OMAS without an associated neuroblastoma and with new onset supraventricular tachycardia (SVT) and review the associated literature.

Design/Methods

NA.

Results

A 9-month-old male with a past medical history of macrocephaly, hypotonia, and developmental delay presented with abnormal eye and body movements starting one month prior. Due to concern for OMS, the patient underwent an extensive initial workup including CT neck, chest, abdomen, and pelvis and VHA/HMA levels, which were all within normal limits. The patient's spinal fluid revealed no evidence of paraneoplastic, autoimmune, or infectious processes. Per neurology recommendations, the patient was started on IVIG and dexamethasone. After his first IVIG infusion, the patient's abnormal movements worsened, and his heart rate increased into the 300s. The IVIG was discontinued. However, the patient continued to have recurring bouts of SVT, which was eventually controlled with digoxin. After resuming treatment with IVIG and dexamethasone, the patient's opsoclonus myoclonus symptoms began to improve. All additional metabolic labs resulted normal and the patient was discharged.

Conclusions

Because OMS can cause permanent developmental delay, prompt recognition and treatment of this syndrome is necessary. This is a unique case of OMAS without neuroblastoma, associated with recurrent bouts of SVT. Recognizing rare complications of OMS is crucial to improving medical management of its sequelae.

Disclosure: Mr. Giakas has nothing to disclose. Ms. Garner has nothing to disclose. Mr. Korin has nothing to disclose. Dr. Edwards has nothing to disclose.

GABABR IgG Associated Encephalitis: Clinical Presentations and Measures to Improve Diagnostic Assay Specificity

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Objective

To review the clinical/oncological presentations of gamma aminobutyric acid-B receptor (GABABR)-IgG and evaluate the clinical specificity of antibody testing methodologies.

Background

GABABR-IgG is an intermediate-risk paraneoplastic autoantibody commonly associated with encephalitis and/or seizures.

Design/Methods

GABABR-IgG positive patients tested at Mayo Clinic Neuroimmunology Laboratory were identified. Available archived sera were retested by cell-based assay (CBA) at 1:10 and 1:100 dilutions.

Results

105 GABABR-IgG seropositive patients with clinical details were identified (females, n = 56; median age 63 [range 8-82]). Most patients had one of three anti-GABABR encephalitis/seizure presentations: focal-onset seizures with altered mental status (n = 39), new-onset

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