Title: Limbic Encephalitis Associated with Thyroglobulin, A Case Report.

Authors: Lauren Bartels, DO, Nabil Faridi, DO, and Yu-Jen Lai, MD

Case Diagnosis: Limbic Encephalitis Associated with Thyroglobulin

Case Description: 30-year-old healthy male found unresponsive following flu-like episode. He had severe agitation and seizures requiring numerous anti-seizure medications and sedatives. Brain MRI showed increased signal intensity in the limbic system. Lumbar puncture revealed elevated WBC with monocyte predominance and was negative for viral etiologies and had elevated thyroglobulin antibody. Serology for paraneoplastic disease and testicular ultrasound was negative. Patient received intravenous immunoglobulin therapy. Patient was transferred to acute rehabilitation and was noted to have moderate cognitive deficits with short term/working memory deficits and impaired reasoning. He was impulsive and had an unsteady gait. In his second week in rehabilitation, his memory improved from 60% to 90% accuracy and he became more aware of his deficits. He was less impulsive, and his reasoning also improved. Patient was admitted to acute rehabilitation for 10 days and made functional gains in balance as well as memory and reasoning.

Discussion: Limbic (autoimmune) encephalitis is believed to be autoimmune, perhaps post-viral in etiology. It has been associated with malignancies such as small cell lung carcinoma (anti-HU antibody), ovarian teratoma (anti-NMDA antibody), and testicular carcinoma. The cardinal findings are psychiatric changes with agitation and psychosis as well as severe impairment of short-term memory and refractory seizures. MRI may reveal increased signal intensity in the temporal lobe and limbic system. Increased thyroglobulin antibody is associated with Hashimoto encephalitis. These antibodies are the markers of the disease but may not necessarily be the cause. Thyroid function can be normal or in some cases, Hashimoto encephalitis is associated with Hashimoto's thyroiditis.

Conclusion: Hashimoto encephalopathy is a rare form of limbic encephalitis that responds to intravenous immunoglobulin. This disorder often remits, with risk for relapse. Further research on the etiology of this rare disease is required.

References:

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