Hashimoto’s Encephalopathy Presenting as Acute Psychosis

Rameshwar Nath Chaurasia* and Vijay Mishra
Associate Professor, Institute of Medical Sciences, Banaras Hindu University, Neurology, India

Abstract
Background: Hashimoto’s encephalopathy is a relapsing encephalopathy occurring in association with Hashimoto’s thyroiditis, with high titers of anti-thyroid antibodies. Clinically the patients may present with acute or subacute encephalopathy, seizure, myoclonus, and tremulousness, stroke like episode, amnesia or dementia. Here we are reporting a case of hashimoto’s encephalopathy that presented with features of acute psychosis.

Case Report: A 56 years old Asian female presented with acute onset of altered behavioural abnormality and declining brain function. Serology revealed high anti thyroperoxidase antibodies. EEG and MRI were consistent with hashimoto’s encephalopathy.

Conclusion: Hashimoto’s encephalopathy is a rare complication of hashimoto’s thyroiditis and is a diagnosis of exclusion and should be suspected in a case of encephalopathy, high anti thyroid antibodies and response to glucocorticoid.

Keywords: Hashimoto’s encephalopathy; Acute psychosis; Magnetic resonance imaging

Introduction
Hashimoto’s encephalopathy has been described as an encephalopathy, with acute or subacute onset, accompanied by seizures, tremor, myoclonus, ataxia, psychosis, and stroke like episode with relapsing/remitting or progressive course. Hashimoto’s encephalopathy is supposed to be of autoimmune origin as supported by its association with other autoimmune diseases. Hashimoto’s encephalopathy is more common in women than in men. It has been reported in paediatric, adult and elderly populations throughout the world. Hashimoto’s encephalopathy is associated with CSF changes, EEG and radiological abnormalities. Hashimoto’s encephalopathy appears to be a rare disorder, but, as it is responsive to treatment with corticosteroids, it must be considered in cases of ‘investigation negative encephalopathy’. Here we report an interesting case of Hashimoto’s encephalopathy who presented with psychiatric manifestations.

Case Report
A 56 years old female diagnosed previously as hypertensive and hypothyroid on 25microgram of levothyroxine daily presented with features of acute psychosis in the form that she was ‘surrounded by her enemies’ and they were ‘trying to kill her’ and she started abusing them and started biting them. She also had auditory hallucinations and psychomotor agitation. Over a period of three to four days she became irritable, irrelevant talking, aggressive behaviour and urinary incontinence, altered sleep cycle, and later only stuttering speech. Although she did not have fever, headache, vomiting, sensory or motor abnormality or history of previous similar complaints or any other psychiatric complains. On examination she was restless, irritable, apraxic, disoriented and not following commands with incomprehensible sound.

Her blood pressure was 160/90 in her right arm supine position, her oral temperature was 38.6 c, and respiratory rate was 18/minute. Pupils were bilateral small and reacting to light and consensual reflex was present. She had no sensory or motor deficit. There was no hepatosplenomegaly and examination of chest and heart were normal.

Routine lab examinations including complete blood count, liver function test and renal function test were within normal parameters. CSF examination showed no cells, sugar of 77 mg/dl and protein of 40 mg/dl. Thyroid function test revealed T3, T4 and TSH of 0.77, 4.77 and 10.87 respectively and anti thyroperoxidase antibody value of 2147.50 units. Chest x ray was within normal limits and two dimensional colour Doppler of heart showed normal heart functions with mild left ventricular hypertrophy. Additionally, antinuclear antibody titre, anti-double-stranded DNA, anti-hepatitis B core antigen, hepatitis B surface antigen, anti-hepatitis C virus, lupus anticoagulant and Venereal Disease Research Laboratory test results were negative. The electroencephalogram (EEG) showed a slow background activity (Figure1).

T2 weighted MRI brain showed chronic lacunar infarct in bilateral periventricular region (Figure 2). During course of the management of the patient, Injection Methyl prednisolone was given intravenously.

Figure 1: Electroencephalogram showing generalized slow background activity.

*Corresponding author: Rameshwar Nath Chaurasia, Associate Professor, Institute of Medical Sciences, Banaras Hindu University, Neurology, Lanka, Varanasi, 221005, India, Tel: +919415353255; Fax: +91-542-2309073; E-mail: golforrameshwar@gmail.com

Received October 18, 2014; Accepted November 27, 2014; Published December 03, 2014


Copyright: © 2014 Chaurasia RN, et al. This is an open-access article distributed under the terms of the Creative Commons Attribution License, which permits unrestricted use, distribution, and reproduction in any medium, provided the original author and source are credited.
autoantibody level was, on day 13th of admission which was declined to 1225 units. Psychosis, which was the major presentation, disappeared and presence of several neuronal and thyroid auto antibodies should always be suspected for hashimoto’s encephalopathy as it is a treatable condition and would avoid mismanagement and unnecessary medications and is very rewarding.

To sum up keep high index of suspicion in any patient with thyroid disorder with atypical presentation of acute psychosis and encephalopathy should always be suspected for hashimoto’s encephalopathy as it is a treatable condition and would avoid mismanagement and unnecessary medications and is very rewarding.

References