Hashimoto's Encephalopathy
by Dr. Sarosh Irani, John Radcliffe Hospital, Oxford

Background
Hashimoto’s Encephalopathy (HE) was first described in 1966. It is a rare condition, which is probably of autoimmune origin. Autoimmunity describes disorders in which the immune system mistakenly attacks and destroys the body’s tissues. HE is usually defined by the presence of high levels of thyroid antibodies in the blood. HE has been reported in all age groups but typically affects females of around 50 years of age.
It is believed that HE may not represent a single diagnosis, but a syndrome which encompasses a number of specific conditions. Therefore, the features of HE are varied. Nevertheless, it is a useful term to help guide treatments, as described below.

What are the symptoms?
The clinical presentation of HE (the symptoms) occurs over a few weeks or months and often includes drowsiness, imbalance, episodes which look like strokes, psychiatric disturbances, jerky movements (some of which may be seizures) and sometimes coma.

What are the causes?
Currently, the exact cause is unknown although a role for autoimmunity is favoured. The thyroid antibodies are thought likely to be a marker rather than the cause of the problem. Thyroid function is usually normal.

How is it diagnosed?
HE is a diagnosis of exclusion. To diagnose HE it is important to rule out a whole range of other conditions including Creutzfeldt-Jacob disease, viral or other antibody-associated Encephalitis and dementia such as Alzheimer's. Useful tests include Magnetic Resonance Imaging (MRI) of the brain, Electroencephalogram (EEG), Cerebrospinal Fluid (CSF) findings, hormonal and metabolic blood screens, and viral studies.
How is it treated?
Most patients with HE improve with high dose steroids (most often prednisolone). Improvement may be rapid, taking days to weeks, but sometimes can take many months. Because of the improvement with steroids, some experts refer to the condition as “Steroid Responsive Encephalopathy associated with Autoimmune Thyroiditis (SREAT)”. Plasma exchange and intravenous immunoglobulin (IVIG) have been used in some patients who show a limited response to steroids. The prognosis with treatment is generally good. Steroids are often continued for many months.

How has the understanding of HE changed in the last decade?
A number of autoantibodies, other than thyroid antibodies, have been described in patients with many similar features to typical cases of HE over the last decade. Therefore, the concept of HE is becoming fragmented into a number of other types of autoimmune Encephalitis which appear to have their own autoantibodies, prognosis and associated features.

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