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# Hashimoto Encephalopathy (SREAT)

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Hashimoto Encephalopathy (HE) is an uncommon syndrome associated with Hashimoto thyroiditis Steroid-responsive encephalopathy associated with autoimmune thyroiditis (SREAT) is another term.

First described in 1966 up to 2005 almost 200 case reports were published.

It is characterised by a high titre of anti-thyroid peroxidase antibodies (Anto TPO) and is more common in women than in men.

The clinical presentation may involve a relapsing and remitting course and include seizures, stroke-like episodes, cognitive decline, neuropsychiatric symptoms and myoclonus. Thyroid function is usually clinically and biochemically normal.

**Symptoms**

Personality changes

Aggression

Delusional Behaviour

Concentration and memory problems

Coma

Disorientation

Myoclonus

Psychosis

Seizure status 20%

Stroke like presentation

Pathogenesis – Autoimmune disorder.

**Diagnosis :**

**Lab & Radiology**

Elevated Liver Enzyme level

Increased TSH by 55%

Subclinical hypothyroidism 35%

Overt hypothyroidism 20%

Euthyroid – 20%

Thyroid antibodies – Anti TPO, Anti thyroid microsomal Ab, Anti thyroglobulin Ab (Anti-Tg)

CSF normal

Imaging – Not significant

EEG – Abnormal 90%. Not diagnostic slowing generalised, triphasic waves.

**Differential Diagnosis:**

Alzheimer's disease

CVA

Creutzfeldt-Jakob disease

Autoimmune Encephalitis

**Treatment:**

Steroid responsive

IV / ORAL

Thyroid hormone as applicable

Antiepileptics

IVIG

Plasmapheresis

**Prognosis:**

90% remain in remission after treatment

Untreated coma/death. Some relapse

**Case Report**

41yrs old male employed in a private company with no comorbidities came to medical OPD with a history of low mood, decreased social interaction, decreased sleep and lack of

concentration.(Informant wife). He was diagnosed to have hypothyroidism 3 months ago and was on replacement therapy. Progressively noted to have episodic abnormal behaviour, inability to perform his duties and forgetting his normal travel route. He was thereafter started on Psychiatric medication. He had an episode of the seizure (tonic-clonic clenching with absence, witnessed).

No past history of diabetes, hypertension, head injury or past history of seizures. No vices. In the OP was found to be in a confused state (? post ictal) Vitals BP / 90/60mmHg. Rest normal. He was admitted with a provisional diagnosis of encephalopathy of unknown course.

Lab investigations- CBC – Megaloblastic. Sugar RFT, Electrolytes – Normal. ECG Normal. MRI Brain Normal. EEG Normal. CSF is normal. Thyroid profile – Euthyroid.

Anti-TPO – 816 elevated IU/ml (> 500 significant) (N - < 9 IU / ml)

A clinical diagnosis of Hashimoto Encephalopathy was made.

Treated with antiepileptics, continued with Thyroxine, IV Methyl Prednisolone 1g IV OD x 3 followed by oral steroids tapering dose.

He showed good improvement and became alert oriented. No seizure recurrence. Discharged. On follow-up well. Steroids were tapered and stopped over 6 months. Antiepileptics continued + thyroxine.

At follow-up at 1 year well. Lost to follow up after that.

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