



# Hashimoto's Encephalopathy: a case report.

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## INTRODUCTION

Hashimoto's Encephalopathy (HE) is a rare syndrome with presumed autoimmune etiology, characterized by encephalopathy and central nervous system dysfunction with elevated titers of anti-thyroid antibodies, and responsiveness to steroid therapy. Symptoms may be represented by cognitive changes and seizures, but also stroke-like episodes had been reported.

## CASE REPORT

A 62-year-old man with a history of mild hypothyroidism presented to our emergency department with headache and aphasia. In few hours he developed extreme psychomotor agitation which needed sedation and intensive care support. MRI of the brain revealed no acute intracranial process, but only a mild dural enhancement (Fig.1); ECG recording, EEG and laboratory studies including TSH was normal. Basal Cerebrospinal fluid (CSF) analysis was unremarkable. When sedation was stopped he had a generalized tonic-clonic seizure, and EEG revealed a status epilepticus (Fig.2). Several anticonvulsant drugs was started (PHT, LEV, TPM, LCM). **Elevated thyroid peroxidase antibody** was detected both in **serum (484 UI/ml - nv <50)** both in **CSF (2.4 UI/ml - nv <0.1)** and a tentative diagnosis of HE was made. A 5-day course of IV methylprednisolone 1 g daily was started, which was then switched to oral prednisone, with a significant improvement in state of consciousness. Anyway, he was disoriented in space and times, and psychiatric symptoms (psychomotor agitation and confabulation) persisted. In the following weeks his cognitive status started to recover and he was eventually discharged to a neurorehabilitation facility.

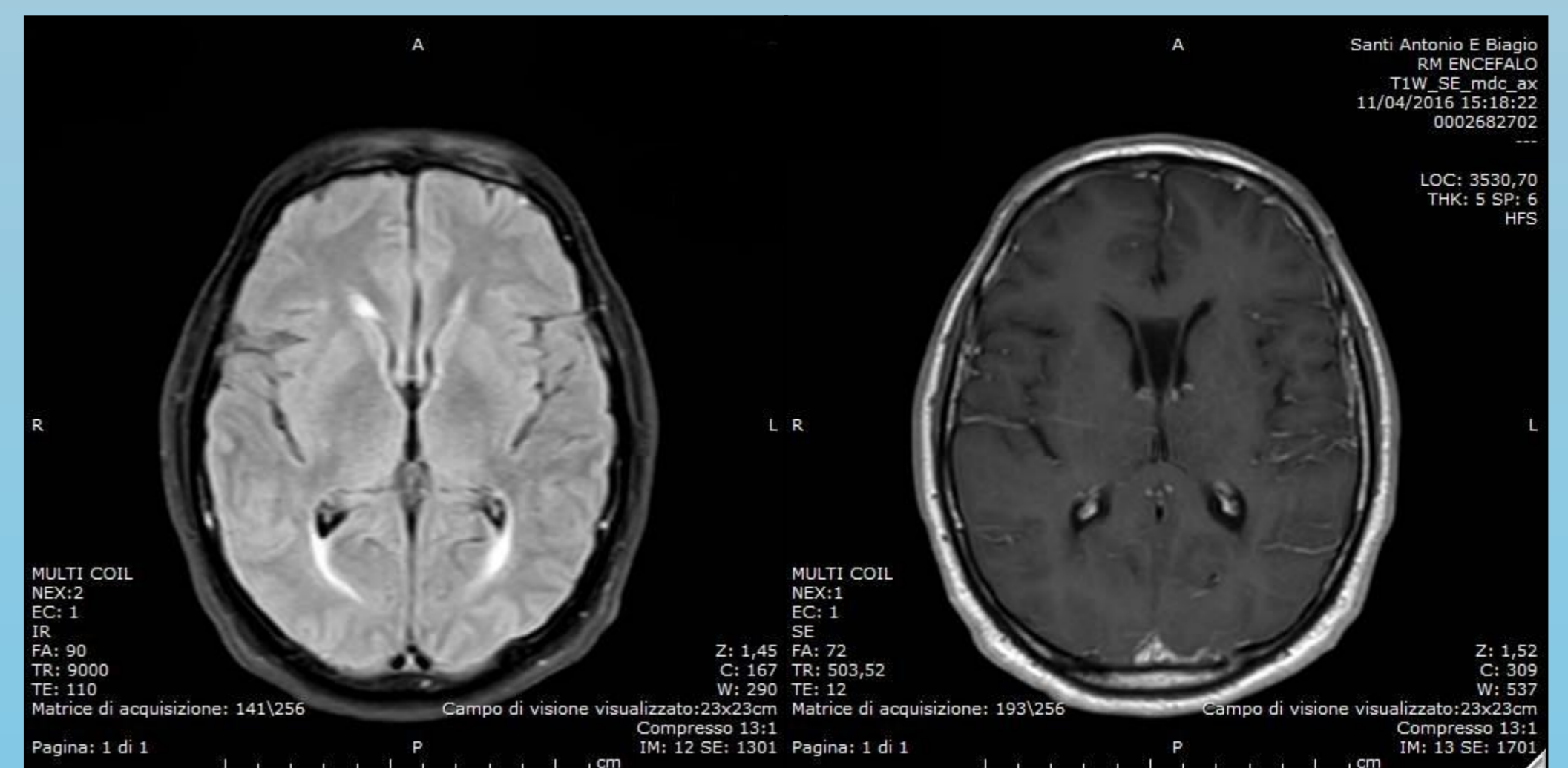


Fig.1

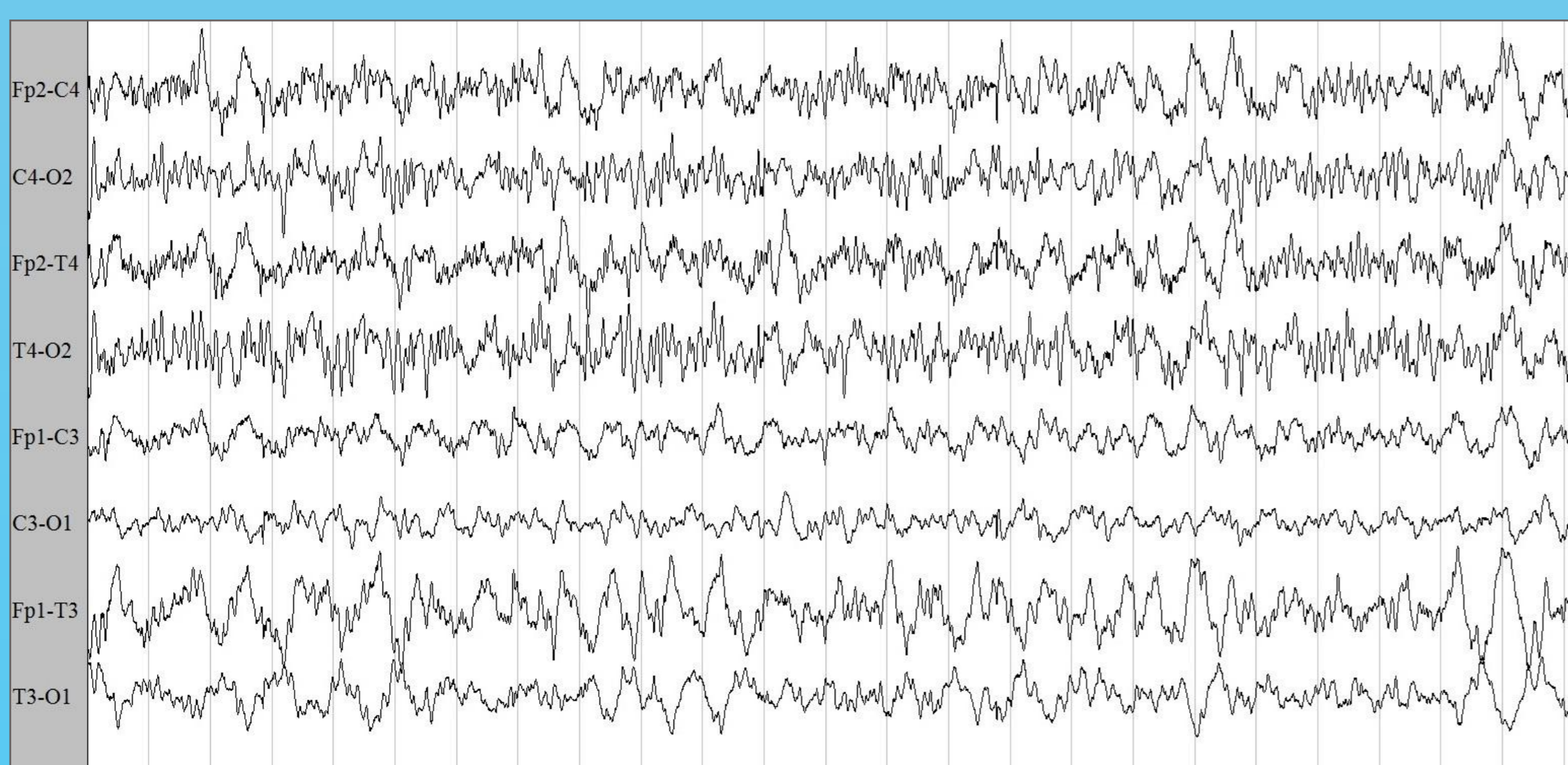


Fig.2

## DISCUSSION

HE it is a rare entity first described in 1966 by Brain et al. and characterized by elevated anti-thyroid antibodies in the absence of a central nervous system infection, tumor or stroke. There are two distinct presentation of HE: the first type with stroke-like episodes, and the second with an indolent progressive type. The hallmark presenting feature is a non specific encephalopathy characterized by alteration of mental status and consciousness ranging from confusion to coma and impaired cognitive function. The standard treatment is the use of steroids along with the treatment of dysthyroidism as well as the use of antiepileptic drugs for seizures and status epilepticus. The response is variable.

## CONCLUSIONS

HE is a treatable form of dementia and should be suspected in patients with cognitive changes and seizures with unknown causes. A timely treatment with steroids should be started to improve patient outcomes.

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