

A Borderline Personality Disorder and Autoimmune Thyroiditis: A Case Report

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Abstract

Case Report

The association between autoimmune thyroiditis and encephalopathy is rare and well known. A case report of a patient with borderline disorder (BLD) with fluctuating mood and psychotic symptoms using double blind method shows a significant relationship between psychotic symptoms and fluctuating antithyroid antibody titers [1]. We report here a case of patient with BLD and autoimmune thyroiditis. Improvement of BLD traits is obtained after adding thyroid hormones replacement therapy to psychotropic medication.

Keywords: Thyroiditis and encephalopathy, Borderline Disorder (BLD), Thyroid, Hormones.

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INTRODUCTION

Thyroid dysfunction is common in major psychiatric disorders. The association between thyroid dysfunction T3 level and violent aggressive behavior may be valid in patients with BLD [2]. We report a case of female patient with BLD whose fluctuating mood and psychotic symptoms and no clinical response to sustained psychotropic medication were linked to autoimmune thyroiditis.

PATIENT AND OBSERVATION

Mrs F. age 20, divorced and mother of 2 children; with charged pathological history: behavioral disorder, agitation, impulsivity, repeated suicide attempts, behavior sexual risks and use of psychoactive substances. No significant improvement is observed with sustained psychotropic medication (3 years medical follow-up) including neuroleptics, antidepressants and anxiolytics.

The interview found intolerance to frustration, chronic feelings of emptiness, emotional instability in reaction to day to day events, unstable and intense interpersonal relationship, inappropriate and intense anger, self-harming behavior and transient and stress related paranoid ideation. The diagnosis of BLD was retained according to DSM5.

A brain CT scan was requested returned with no abnormalities. But a standard biological assessment revealed a very high TSH; T3 and T4 collapsed.

An endocrinologist advice concluded to an autoimmune thyroiditis [Hashimoto thyroiditis] confirmed by the presence of positive antibodies TPO and an ultrasound examination.

Thyroid hormones replacement therapy was initiated in association with olanzapine 15 mg, paroxetine 40 mg and lorazepam 5mg.

The evolution, after 2 months and 12 months follow-up, was marked by an improvement in self-harming behavior, impulsivity and psychotic symptoms.

DISCUSSION

This case evaluation revealed a relationship between borderline psychopathology and autoimmune thyroiditis in patient with BLD as determined by the improvement of the three dimensions (self-harming behavior, impulsivity and psychotic symptoms) after the thyroid hormones replacement therapy.

Earlier studies report the association between thyroid dysfunction and violent behavior. A clinically significant and longitudinal correlation between fluctuating antithyroid antibodies titers and symptoms

of borderline psychopathology especially depressive and psychotic symptoms; serially determined over an inpatient period of 275 days rated using double blind method [1]. Another study demonstrates a significant correlation between high T3 levels and aggressive or violent behavior in a sample of 92 euthyroid women with borderline disorder compared to 54 healthy women [2].

The neurobiological mechanisms underlying or correlating with these personality traits have not been fully characterized. The hypothalamo-pituitary-thyroid axis involvement in relation with aggressive personality traits may indicate involvement of altered thyroid hormones in clinical endophenotypes characterized by aggressive, impulsive and suicidal behaviors [3].

The autoantibody linked to borderline psychopathology represents in part a subencephalopathic auto-immune mediated change in brain function [1]. Hashimoto encephalopathy often responds clinically to glucocorticoids but not necessarily to exogenous thyroid hormones [1]. In our patient,

improvement of 3 dimensions of borderline psychopathology is observed after adding thyroid hormone replacement therapy to psychotropic medication.

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