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## CASE REPORT OF HYPOTHYROIDISM INDUCED PSYCHOSIS

V. Jesinda Vedanayagi\*<sup>1</sup>

<sup>1</sup>\*Head of the Department Mental Health Nursing, Sacred Heart Nursing College, Madurai, Tamilnadu, India.

### ABSTRACT

Hypothyroidism is a common endocrine disorder resulting from deficiency of thyroid hormone. Deficiency of thyroid hormone can produce more and deleterious effects on the human body. Autoimmune thyroid disease (Hashimoto disease) is the most widespread cause of hypothyroidism. Worldwide, iodine deficiency remains the foremost cause. In this article, a 38 years old female client with hypothyroidism diagnosed for 6 years who underwent total thyroidectomy with Hashimoto thyroiditis. Now the client is having symptoms like talking to self, laughing to self, boastful talk, irrelevant talk, running out of home, sleep disturbances and anger outburst for the past 15 days. Tab. Risperidone 2mg Bd, Tab. Sodium Valporate 200mg Tds and Tab.thyroxine 100µmg OD given. T3, T4 and TSH revealed a remarked reduction in the psychotic symptoms.

### KEYWORDS

Hypothyroidism, Thyroid hormone, psychosis and Antipsychotics.

### Author for Correspondence:

Jesinda Vedanayagi V,  
Head of the Department Mental Health Nursing,  
Sacred Heart Nursing College,  
Madurai, Tamilnadu, India.

**Email:** [jesindasam@gmail.com](mailto:jesindasam@gmail.com)

### INTRODUCTION

Hypothyroidism is a condition in which the thyroid gland is unable to generate adequate thyroid hormone. The thyroid hormones control metabolism. If thyroxine levels are reduced, various body's functions slow down metabolism. Hashimoto's thyroiditis is the commonest reason of hypothyroidism in countries with adequate dietary iodine. Fewer common causes include earlier treatment with radioactive iodine, damage to the hypothalamus or the anterior pituitary gland, certain medications and previous thyroid surgery. Thyroid deficiency can have an effect on all body functions and it occurs in specific individuals at different instances. Prevalence of hypothyroidism in India is

around 11% and it affects 1 in 10 adults. South Indians have elevated thyroid peroxidase antibody levels in around 9.5% of general population. The maximum incidence of hypothyroidism (13.1%) is observed in person aged 46-54 years, with person aged 18-35 years being lower affected (7.5%).

Hypothyroidism is a possible etiology for many physical complaints and more psychological disturbances. The somatic symptoms are due to metabolic slowing secondary to inadequacy of thyroid hormone. Hypothyroidism is commonly associated with a number of psychiatric conditions, most commonly depression and cognitive impairments, but up to 5% to 15% of symptomatically hypothyroid patients may develop a non affective psychosis classically named as "myxedema madness". Hypothyroidism induced psychosis in the patient accompanied by Hashimoto thyroiditis who already underwent for total thyroidectomy is aimed to be presented here.

### CASE PRESENTATION

Ms.X, a thirty eight year old female client with no former psychiatric history was admitted to our hospital with the complaints of anger outburst, picking up quarrel with neighbours, running out of home, boastful talk, talking to self, laughing to self, irrelevant talk, sleep disturbances and suicidal attempt. These symptoms were present for 15 days. The patient has been taking Thyroxine for 6 years and underwent for total thyroidectomy and discontinued the medication. On examination, her vital signs were stable. Findings of her mental status examination revealed delusion and hallucination. Laboratory values showed that Thyroid stimulating hormone (TSH) level was 48.69 $\mu$ U/ML, T3 level was 20ng/dL and T4 level was 1.0 $\mu$ g/dL. The patient was started with Thyroxine, Risperidone and Sodium valproate. After 20 days, the psychotic symptoms have decreased and Ms. X was able to do her routine activities.

### CONCLUSION

Hypothyroidism is a clinical syndrome resulting from an insufficiency of thyroid hormones. Thyroid dysfunction is well-known to cause a number of neuropsychiatric symptoms, together with mood disorders, psychosis and cognitive dysfunction. 1 in 10 persons in India has thyroid issues and over 60% of the people go undiagnosed because most of the symptoms are non specific. People frequently mistake them for other health issues and ignore. Prompt notification of high levels of TSH, close monitoring of vital signs and mental status by nurses can facilitate early treatment and better outcomes.

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### CONFLICT OF INTEREST

I declare that I have no conflict of interest.

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