

## Comorbidity of Autoimmune Thyroid Disease and Psychiatric Disorders: A Cross-Sectional Study from Southern India.

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### ABSTRACT

**Background and Aims:** Autoimmune thyroid disease (AITD) is associated with a multitude of neuropsychiatric symptoms and cognitive impairment. Though it is one of the most common cause of acquired primary hypothyroidism, there is a dearth of literature regarding the psychiatric presentations of thyroid autoimmunity in southern India. **Objectives:** To study the psychiatric comorbidities in patients with AITD and determine the relationship between thyroid peroxidase antibody level with severity of psychiatric illness and cognitive impairment. **Materials and Methods :** This cross-sectional study of one year duration was conducted in department of Psychiatry of a tertiary-care hospital in Kerala. Subjects with AITD and new onset behavioural symptoms were selected, diagnosis was made based on DSM 5 diagnostic criteria, illness severity was assessed using HAM-A, HAM-D, BPRS rating scales and severity of cognitive impairment was assessed using MoCA scale. Statistical analysis was done using percentage, mean, SD and Spearman's correlation coefficient. **Results:** Out of 60 subjects, 82% were women and 52% had a family history of thyroid dysfunction. The most common psychiatric diagnosis were Major Depressive Disorder, Panic disorder and Schizophreniform disorder with moderate to severe illness and mild cognitive impairment. Significant positive correlation between thyroid peroxidase antibody level and severity of depressive and anxiety disorder was found. **Conclusion:** The common psychiatric comorbidities, its severity and cognitive impairment in AITD and its relation with thyroid peroxidase antibody level could be described. A holistic teamwork comprising of endocrinologists and psychiatrists can help in early detection and management of these issues.

**Keywords:** anxiety, autoimmunity, cognition, depression, psychosis, thyroid