Fifteen-year follow-up of thyroid function in lithium patients.

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Abstract

OBJECTIVE: To study prospectively the course of clinically relevant thyroid dysfunction in a cohort of patients on long-term lithium treatment. METHOD: Patients (no.=150) who had undergone a cross-sectional evaluation of their thyroid function in 1989, when they were at different stages of lithium treatment, were followed up for thyroid circulating thyroid antibodies, hypothyroidism, hyperthyroidism, and thyroidectomy, during a further period of lithium exposure of up to 15 yr. RESULTS: Annual rates of newly developed circulating thyroid antibodies and hypothyroidism were 1.7 and 1.5%, respectively. Subjects with thyroid antibodies had a higher chance of requiring substitution treatment with levothyroxine for hypothyroidism compared with subjects with no evidence of thyroid antibodies (6.4% annual rate compared to 0.8%; relative risk: 8.4; 95% confidence interval: 2.9-24.0). One case of hyperthyroidism was observed over 976 patient-yr. Three patients underwent thyroidectomy during follow up (two for multinodular goiter and one for multicentric papillary carcinoma). CONCLUSIONS: Lithium may be associated with hypothyroidism in particular in the presence of circulating thyroid antibodies. Incidence of thyroid antibodies is comparable with that reported for the general population. Hyperthyroidism and thyroid cancer are rare.

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