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## **ABSTRACTS** E-BOOK

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**THE EFFECT OF THYROID AUTOANTIBODIES ON DYSLIPIDEMIA IN PATIENTS WITH MILD FORM OF SUBCLINICAL HYPOTHYROIDISM**

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**Introduction:** Increased incidence of dyslipidemia was found in patients with subclinical hypothyroidism (Sch) with positive anti-TPO antibodies. However, there are no studies which evaluate the effect of thyroid substitution therapy on lipids in these patients.

**Aim:** To evaluate the effect of the presence of anti-TPO antibodies on lipid parameters in patients with mild form of Sch treated with levothyroxine.

**Materials and methods:** Fifty-seven patients with newly diagnosed subclinical hypothyroidism (Sch) and thyroid-stimulating hormone (TSH) levels below 10 mIU/L, who met the treatment criteria, were included in the study. Lipid parameters and anti-TPO antibodies were evaluated at the first visit and only lipids after 5 months euthyroid stage.

**Results.** The average value of TSH in patients was  $8.1 \pm 1.9$  mIU/L. The euthyroid state was achieved with a mean dose of  $60.8 \pm 19$  µg in a mean duration of  $7.5 \pm 2.2$  months. Thyroid substitution therapy significantly decreased total cholesterol and LDL-C, and increased HDL-C. TSH positively correlated with total cholesterol ( $r = 0.147$ ,  $p < 0.05$ ), and FT4 statistically significantly positively correlated with HDL-C ( $r = 0.197$ ,  $p < 0.05$ ). The lipid parameters did not respond to L-T4 treatment in patients with negative anti-TPO antibodies, while a decrease in total cholesterol, total cholesterol/HDL-C, and LDL-C/HDL-C was observed in patients with positive anti-TPO antibodies.

**Conclusion:** Patients with mild Sch and positive anti-TPO antibodies with high cholesterol levels may benefit from thyroid substitution therapy.

**Keywords:** subclinical hypothyroidism, dyslipidemia, thyroid autoantibodies, thyroid substitution therapy

