Prevalence of Autoimmune Thyroid Markers in Euthyroid Women With Polycystic Ovary syndrome

Assessment of Autoimmune Thyroid Markers in Euthyroid Egyptian Patients with Polycystic Ovary Syndrome

1Ahmed Mohamed Bahaa El-din, 1Alyaa Ahmed El-Sherbeny, 1Emad Abd El-mohsen Abd El-hadi, 1Hesham Abouellail and 2Manal Mohsen
1Internal Medicine, Faculty of Medicine, Ain Shams University, Egypt
2Clinical Pathology, Faculty of Medicine, Ain Shams University, Egypt

OBJECTIVES:

to compare the prevalence, levels of thyroid auto-antibodies in a group of Egyptian women with PCOS and a control group in reproductive age to determine whether women with PCOS have a greater risk of thyroid autoimmune diseases, thyroid dysfunction or not.

METHODS:

This study was conducted on 45 euthyroid women with PCOS and 18 healthy women as a control in the Outpatient Clinics of Endocrinology, Ain Shams University hospital. PCOS was defined by the revised 2003 Rotterdam criteria. Thyroid function was evaluated by measurement of TSH and FT4 levels, antithyroid peroxidase and antithyroglobulin antibodies (anti-TPO and anti-TG, respectively) as markers for thyroid autoimmunity. All parameters were measured using electrochemiluminescence immunoassay.

RESULTS:

Women with PCOS had significantly higher levels of anti-TPO in comparison to controls (27 ± 10 and 21 ± 10 IU/mL, respectively; p< 0.05) and no significant difference was found in serum levels of anti-TG, TSH, or FT4 between the two groups. Patients with PCOS had a non significant higher prevalence of positive results for anti-TG and/or anti-TPO in comparison to controls (40% and 22.2%, respectively; p >0.05), anti-TPO alone (28.9% and 16.7%, respectively; p> 0.05) and anti-TG alone (22.2% and 11.1%, respectively; p > 0.05). No significant associations were found between the assayed antibodies and thyroid hormones.

CONCLUSIONS:

This study shows that PCOS was associated with presence of positive thyroid auto-antibodies in the sera of Egyptian patients; so that, these patients could be at increased risk of thyroid disorders (and fetal loss?). Thyroid autoimmunity markers should be requested in patients with PCOS who decide to get pregnant even when there is no evidence of overt thyroid dysfunction.

REFERENCES:


