

Frequency of Thyroid autoimmunity in Melasma patients referred to Ardabil Imam Khomeini hospital Dermatology clinic

Abstract:

Introduction

Melasma is an acquired hyper melanosis that occurs as irregular and dark to light brown macules and patches in exposed to sunlight areas in a symmetric forms. This disorder is common in women and in reproductive age, even though is also found in adolescence, elderly women and sometimes in men. Genetic and environmental factors play a role in causing this disorder. Therefore, in the present study was intended to investigate the prevalence of thyroid hormonal disorders in patients with melasma.

Material and Methods

This is a case control study. In this study 40 patients with melasma who referred to Dermatology clinic of Imam Khomeini hospital were selected with a control for each patient that control group was not pregnant and had no history of melasma at any time in their life. Information of each patient and control was entered in check lists. Then the subjects were referred to laboratory to perform peroxidase antibodies (TPO) evaluation by ELISA method and also TSH measurement.

Results

In this study all patients were female. The average age of melasma group was 29.07 ± 0.74 years and control group was 30.45 ± 6.20 years old ($p=0.172$). In patients 30% were with familial history of malasma, 67.14% were with central pattern of facial melasma and in 40.7% the major cause of its incidence was pregnancy. In this study was observed the average level of TSH in patients was 2.97 ± 2.21 μ /ml and in control was 2.7 ± 1.48 μ /ml ($p=0.373$) and also 18.0% of patients and 4.3% of control group were with thyroid disorders. The average level of anti TPO in patients was 22.9 ± 14.46 IU/L and in healthy persons in control group was 19.7 ± 8.69 IU/L ($p=0.113$); 10.7% of patients and 0.7% of control were with increased anti TPO ($p=0.06$). The analysis of data showed that there is a significant relationship among patients with a family history of melasma and thyroid functional disorder incidence ($p=0.006$).

Conclusion

The results of this study showed that thyroid hormonal dysfunction is a common and partly important disorder among patients with melasma . also a high percentage of melasma patients in this study had thyroid autoimmunity disorders, but the difference was not significant statistically.

Keywords: melasma, thyroid hormonal dysfunction, thyroid autoimmune disorders, Dermatology clinic