

Study of Serum Level of Thyroid Stimulating Hormone and Thyroid Peroxidase Antibody in Patients with Breast Fibroadenoma

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Abstract

Introduction: Fibroadenoma is the most common benign breast mass that occurs in young women. Many endocrine and non endocrine theories have been proposed about benign breast disease including the role of thyroid hormones. Some studies have noted the high prevalence of thyroid disorder in benign and malignant breast disease. So The aim of this study was to determine the level of thyroid-stimulating hormone (TSH) and thyroid peroxidase antibody (Anti-TPO) status in patients with breast fibroadenomas.

Methods: in this cross sectional study 100 patients with breast fibroadenoma referred to surgery clinic of mostafa khomeini hospital were enrolled. Demographic data were collected through interviews. The size and number of breast masses on sonography was extracted. Measurement of serum TSH and thyroid Anti-TPO was performed for all patients.

Results: The mean age of patient was 26.6 ± 7.37 years and 53% were single. 32% of patients had a history of breastfeeding. Average serum levels of TSH was 2.63 ± 2.32 u/ml. 14% of patients had abnormal serum levels of TSH. Anti-TPO in 9.7% of patients was positive. There was no relationship between Serum levels of TSH and Anti-TPO status with age, size and number of masses and marital status.

Conclusion: The results of our study indicate a high prevalence of thyroid dysfunction in patients with breast fibroadenomas, in which the incidence of hypothyroidism is more than hyperthyroidism. The prevalence of autoimmune hypothyroidism in our study was relatively high, but the frequency of autoimmune hyperthyroidism is negligible.

Keywords: Thyroid Stimulating Hormone, Thyroid Peroxidase Antibodies, Fibroadenoma, Breast.