# Analysis of Demographic Characteristics and Laboratory Data of Patients Diagnosed with Autoimmune Thyroiditis

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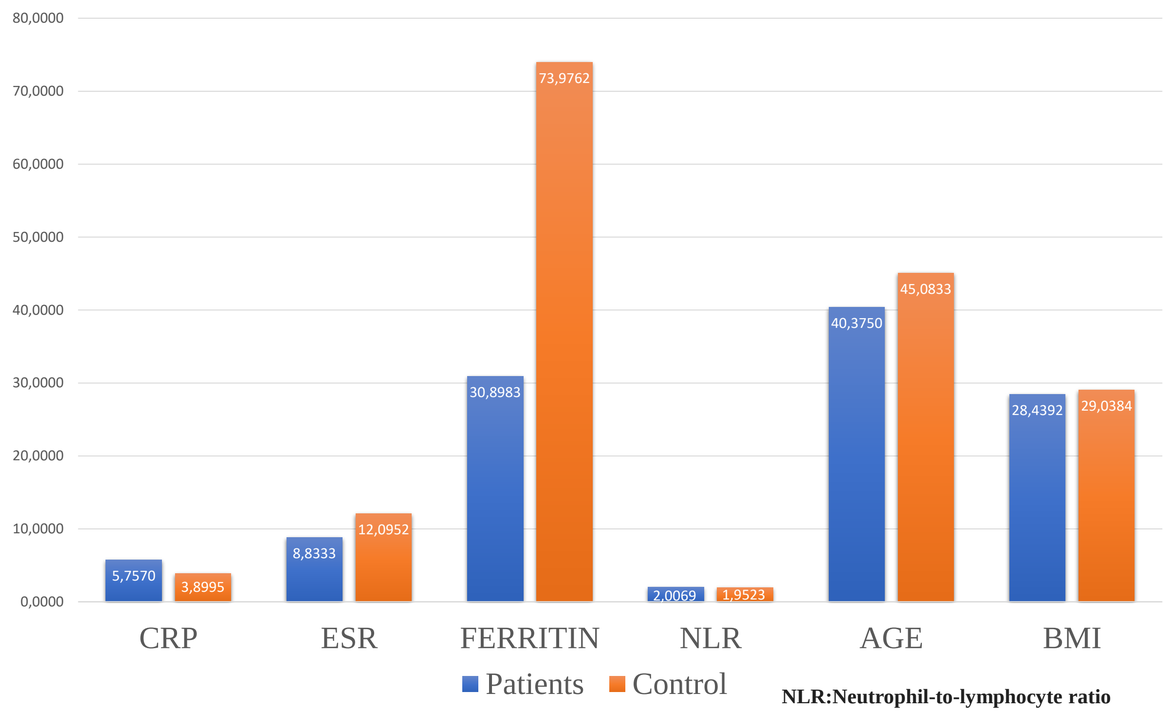
**Introduction:**

Autoimmune thyroiditis is a common cause of thyroid diseases, including Graves-Basedow disease and Hashimoto thyroiditis. Autoimmune thyroiditis is marked by thyroid-specific autoantibodies and is linked to genetic, environmental, and epigenetic factors. In our study, individuals followed up with a diagnosis of autoimmune thyroiditis in the adult age group will be examined in terms of demographic and laboratory characteristics, and in particular, the connection between autoimmune thyroiditis disease and inflammatory markers will be investigated.


**NLR:Neutrophil-to-lymphocyte ratio**

**Result:**

In the first group there were 16 female 8 male, average age was 40,37 and average BMI was 28,43. In control group there were 18 female, 6 male, average age was 45,08 and average BMI was 29,03. No statistically significant difference was found in inflammatory markers (CRP, ESR, Neutrophil-to-lymphocyte ratio, Ferritin) but a significant difference was found between thyroiditis findings in USG (p=0,002) between two groups.

| | USG (+) | TSH | T4 | Anti-TPO | Anti-TG |
|---|---|---|---|---|---|
| Patients | %94,7 | 12,19 | 11,84 | 2973,62 | 438,16 |
| Control | %50 | 8,84 | 13,55 | 31,12 | 1,94 |

**Materials and Methods:**

Patients diagnosed with Autoimmune Thyroiditis (24 people) and healthy control group (24 people) for autoimmune thyroiditis who applied to Bezmialem Vakıf University Faculty of Medicine Hospital between January 2023 and January 2024 were included in the study. Of the 6456 patients screened, 5584 (86%) were female and 872 (14%) were male. Autoimmune thyroiditis was diagnosed based on high thyroid stimulating immunoglobulin, Anti-Thyroglobulin(Anti-TG) and Anti-Thyroperoxidase(Anti-TPO) titers and/or thyroiditis findings on thyroid ultrasonography. Patients' demographic information, laboratory data and USG images were analyzed and compared for the patient group and the control group.

**Aim:**

To investigate the effect of autoimmune marker positivity on inflammatory markers and to see the distribution of the disease in the society and its effect on laboratory data.

**Statistical method:**

After the data were collected, we checked whether there is a connection between the data by statistical analysis using IBM SPSS Statistics 21.0 Program. Statistical methods (percentile test, chi-square test, standard deviation, median and t-test) is used in our study.

**Conclusion:**

As expected, 86% of the patients evaluated were women. As with most autoimmune diseases, the incidence of this disease is much higher in women. No significant difference was observed in the inflammatory markers of autoimmune thyroiditis patients compared to healthy patients. It should be kept in mind that the fact that most of these patients were under treatment and the small number of cases included in the study may have affected this situation. The significant increase in findings in favor of thyroiditis on USG showed that antibody testing may be important in patients with thyroiditis detected on USG.

**Keywords:** Hashimoto, Graves, Autoimmune thyroiditis, Inflammatory markers, USG

**References:**

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