AIM:
Thyroid hormones influence renal development, kidney structure, renal hemodynamics, glomerular filtration rate, the function of many transport systems along the nephron and sodium and water homeostasis. Patients with hypothyroidism can have clinically important reductions in glomerular filtration rate (GFR). Patients with thyroid disorders are also at risk of immune-mediated glomerular disease. Hashimoto’s thyroiditis and membranous nephropathy are believed to be mediated by immune mechanisms.

In this study we aimed to show the relationship between thyroid function tests, thyroid auto antibodies and GFR in euthyroid Hashimoto’s patients.

RESULTS:
There was no significant correlation between GFR and TSH, BMI, CRP, gender, HDL-cholesterol, total cholesterol, triglyceride. GFR had a significantly negative correlation between LDL-cholesterol, (r= -0.33; P=0.03), age (r= -0.431; P=0.000), had a significantly positive correlation between TPO (r=0.463, p<0.001) , anti TG (r=0.627, p<0.000) (figure 1). Multiple regression analysis with GFR as dependent variable and TPO, age, gender, BMI, CRP as independent variables was performed. TPO was predictive variable for GFR.

CONCLUSION:
In our study increased GFR levels in euthyroid patients with hashimoto’s thyroiditis were found to be independent of age, gender and BMI. There are many studies investigating the relationship between GFR and thyroid function. However, there are a few studies investigating thyroid autoantibodies and GFR. Although our study is one of the first studies to examine the association between GFR and thyroid autoimmunity was insufficient in explaining the mechanism. So, we believe that there is a need of more experimental and covering large group studies.