

CONCLUSION

Results showed that treatment with cholestyramine as an adjunct to standard therapy can lead to greater decrease in Total T3 and FT4 hormones in hyperthyroid patients.

KEY WORDS

cholestyramine, hyperthyroidism, Graves' disease

OA-T-08

LOW NORMAL FREE THYROXINE LEVELS ARE ASSOCIATED WITH PREDIABETES IN EUTHYROID SUBJECTS

<https://doi.org/10.15605/jafes.034.02.S62>

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**Full paper published in the Diabetes Metab J. 2019;43(5):718-26.*

INTRODUCTION

Although the association between low-normal thyroid function and metabolic syndrome was well documented, little is known about the effect of thyroid hormone within the physiological range of carbohydrate metabolism. This study aimed to determine whether free thyroxine (FT4) influences serum glucose concentration and the prevalence of prediabetes in euthyroid subjects.

METHODOLOGY

This was a cross-sectional survey derived from the Korea National Health and Nutrition Examination Survey, conducted between 2013 and 2015. We studied 4,767 participants of >20 years of age who were euthyroid and without diabetes.

RESULTS

Participants with prediabetes had lower FT4 concentrations than those without prediabetes, but thyrotropin concentrations were similar. We stratified the population into tertiles according to FT4 concentration. After adjusting for multiple confounding factors, HbA1c levels significantly decreased with FT4 tertile ($P<0.01$), whereas FBG was not associated with FT4 both in men and in women. The prevalence of prediabetes was significantly higher in T1 than in T3 (OR=1.426, 95% CI 1.126-1.806 in men; OR=1.294, 95% CI 1.004-1.668 in women).

CONCLUSION

Subjects with low-normal serum FT4 had high HbA1c and were more likely to have prediabetes. These results suggest that low FT4 concentration is a risk factor for prediabetes, even though thyroid function is within the normal range. Thus, screening for prediabetes in subjects with low-normal FT4 should involve the measurement of HbA1c.

KEY WORDS

euthyroid, prediabetes, free thyroxine