Autoimmune thyroid diseases (AITD) and mental illness: An evaluation of parietal cell and intrinsic factor antibodies, vitamin B12 and psychiatric symptoms in patients with AITD and Non-AITD controls

INTRODUCTION

Associations of autoimmune thyroid disease (AITD) with autoimmune gastritis and mental disorders have been suggested, but evidence for a respective connection is lacking.

METHODS

We compared the co-incidence of parietal cell antibodies (PCA >20 RE/ml), intrinsic factor antibodies (IFA >1.19 AU/ml), vitamin B12 plasma levels (<200 pg/ml) and mental illness in patients with AITD (n=398), e.g. active (TPO+), atrophic (TPO-) and solely thyroglobulin positive (TG+) Hashimoto's and Grave's disease (TRAK+), and Non-AITD controls (n=144; no thyroid disorder or non-autoimmune hypothyroidism). Results show the overall prevalence of mental illness as well as anxiety disorders (A), depression (D) and somatization disorder (S) separately.

RESULTS

A higher rate of PCA but not IFA was prevalent in AITD vs Non-AITD (22.1% vs 9.7%). Low vitamin B12 levels were found more frequently in TPO- (8.3%) and TG+ (8.7%) Hashimoto’s and Grave’s disease (10.8%, p<0.05). Rates of mental illness were alike in all groups. No association of mental illness with PCA, IFA or vitamin B12 was found.

CONCLUSION

PCA, but not IFA are frequently observed in AITD, and no association of AITD and mental illness was evident in the preliminary results of the present study.