

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

•D. Leineweber¹, MD; B. Gallig², MD; T. H. Schürmeyer¹, MD

¹ Abt. Innere Medizin II, Klinikum Mutterhaus der Borromäerinnen, Trier, ² The Zucker Hillside Hospital, Psychiatry Research, Glen Oaks, New York, USA

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-occurrence 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 (TRAB+), 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

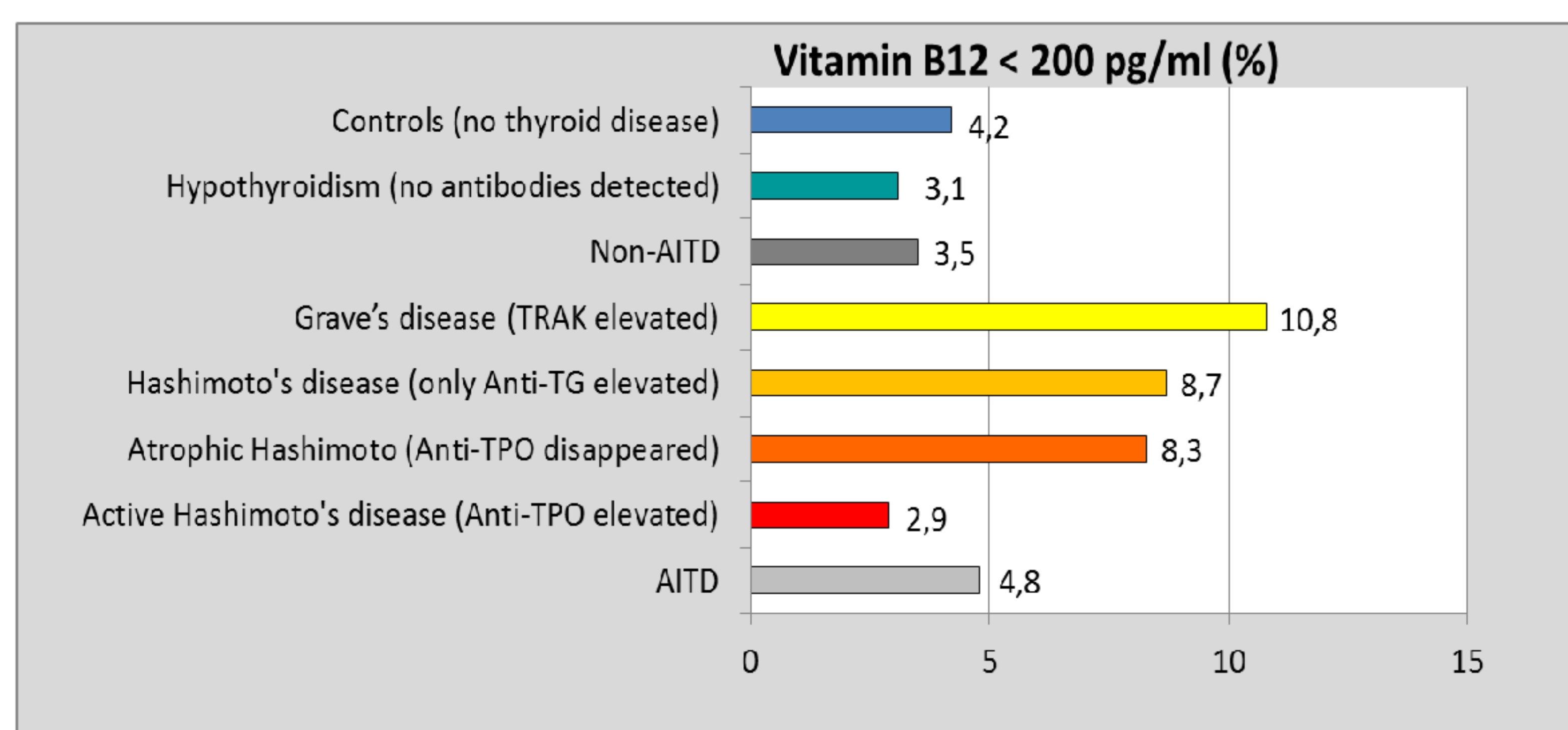
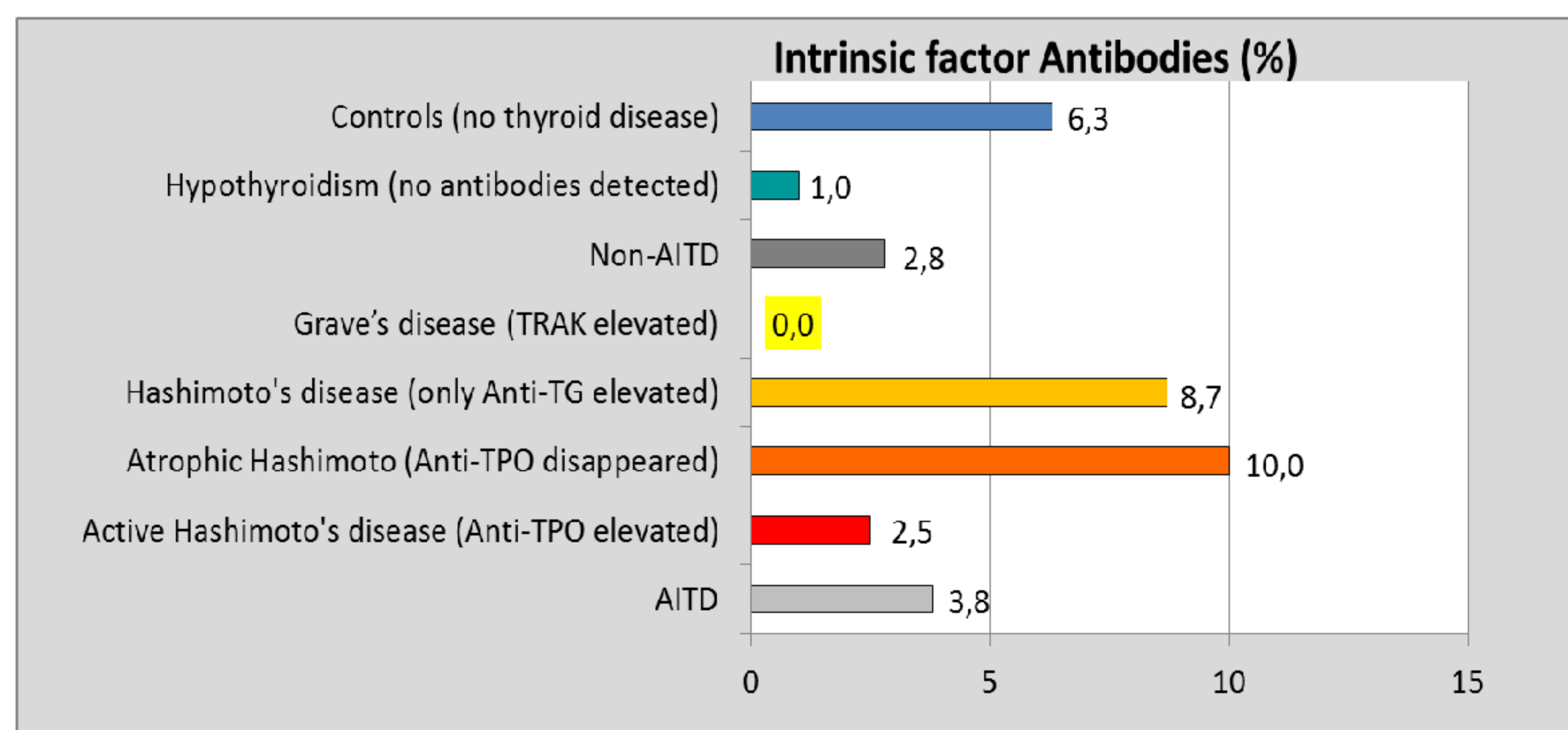
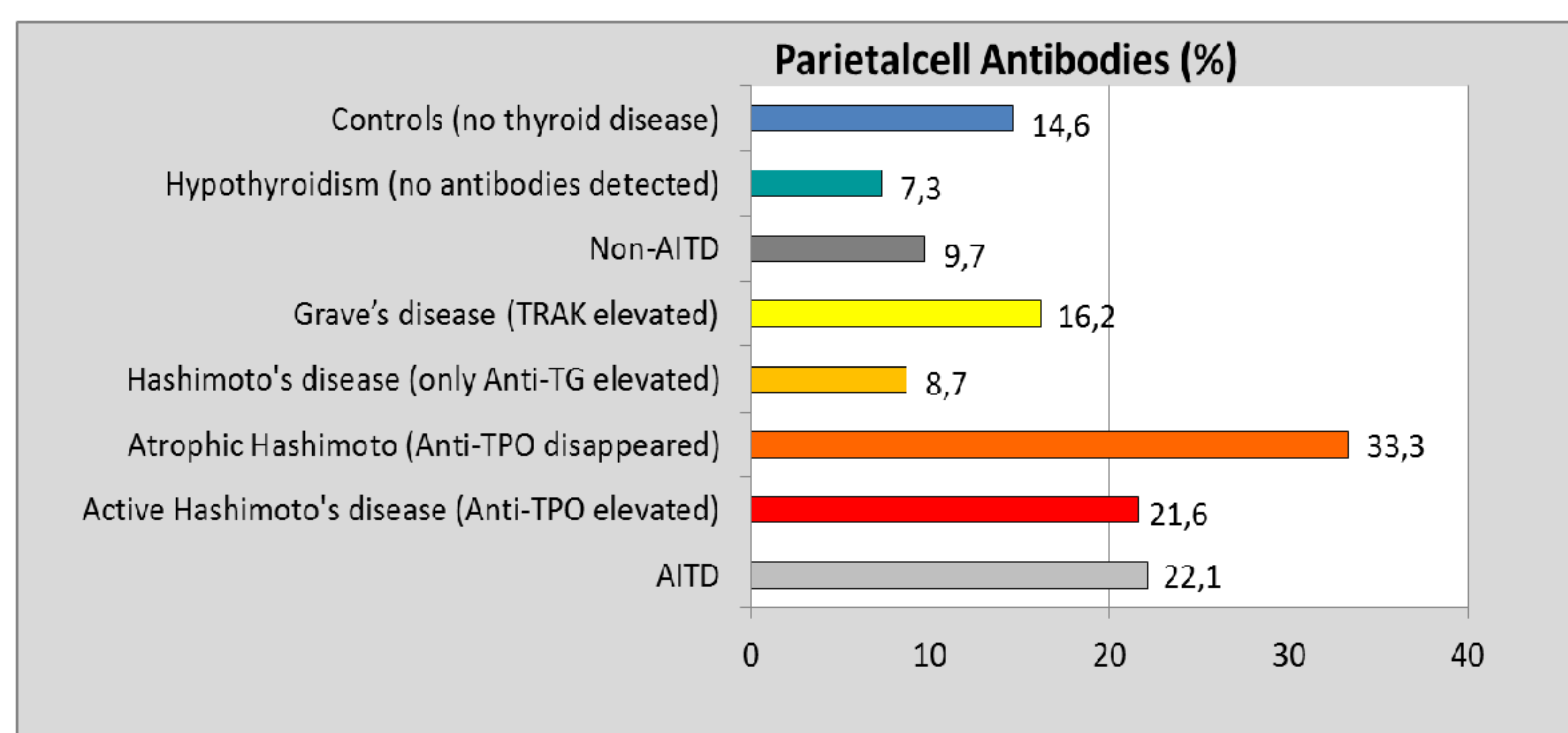
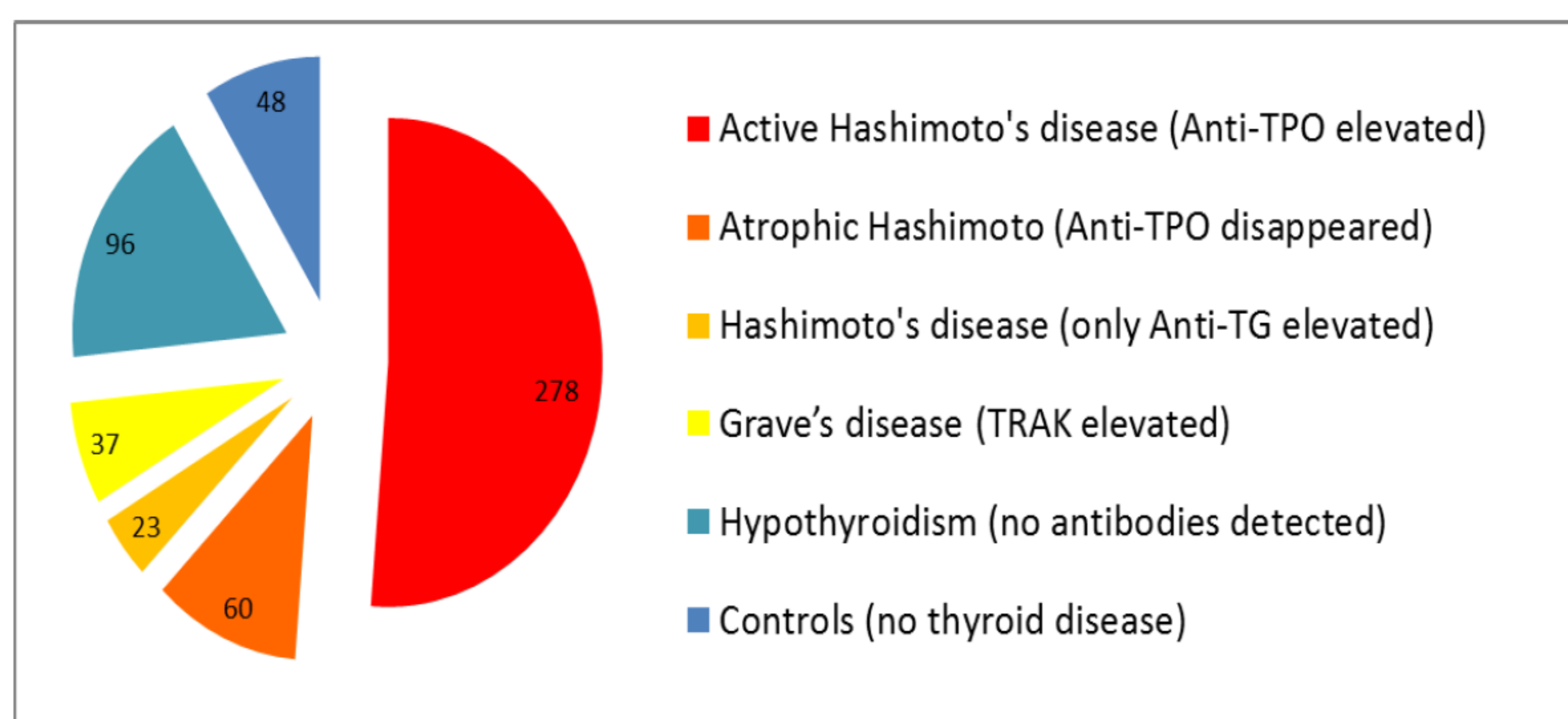
A higher rate of PCA but not IFA was prevalent in AITD vs Non-AITD (22.1% vs 9.7%). Low vitamin B12 levels were found more frequently in TPO- (8.3%) and TG+ (8.7%) Hashimoto's and Grave's disease (10.8%, p<0.05). Rates of mental illness were alike in all groups. No association of mental illness with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

	n	Anti-body	PCA↑	IFA↑	B12 ↓	Mental illness (%)			
			%	%	%	all	A	D	S
AITD	398		22,1	3,8	4,8	31,4	5,6	11,1	13,8
Active Hashimoto	278	TPO+	21,6	2,5	2,9	31,7	6,8	11,9	14,4
Atrophic Hashimoto	60	TPO-	33,3	10,0	8,3	30,0	6,7	15,0	10,0
TG+ Hashimoto	23	TG+	8,7	8,7	8,7	43,5	17,4	0,0	30,4
Grave's disease	37	TRAB	16,2	0,0	10,8	24,3	8,1	5,4	5,4
Non-AITD	144		9,7	2,8	3,5	32,6	7,0	14,6	11,1
Hypothyroidism	96	0	7,3	1,0	3,1	32,3	5,2	17,7	9,4
No thyroid disease	48	0	14,6	6,3	4,2	33,3	10,4	8,3	14,6

n= patients; Bold numbers indicate a significant difference (p<0.05)

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.



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