Autoimmune thyroid disease

Bibliographic reference	Saatar et al. (2011)
Study type	Cross-sectional survey
Study quality	The Joanna Briggs Institute Prevalence Critical Appraisal Tool (http://ijhpm.com/article_2870_607.html) 1. Was the sample representative of the target population? YES 2. Were study participants recruited in an appropriate way? NO – Unclear is consecutive sample recruited 3. Was the sample size adequate? YES 4. Were the study subjects and the setting described in detail? YES 5. Was the data analysis conducted with sufficient coverage of the identified sample? YES 6. Were objective, standard criteria used for the measurement of the condition? YES 7. Was the condition measured reliably? YES 8. Was there appropriate statistical analysis? YES 9. Are all important confounding factors/subgroups/differences identified and accounted for? YES 10. Were subpopulations identified using objective criteria? NA Overall risk of bias = MODERATE
Country	USA
Number of patients	N=302 patients with autoimmune thyroid disease
Study population	Inclusion: patients (adults and children) with positive anti-thyroid antibodies who were recruited from a paediatric endocrinology service

	at a hospital; criteria included positive thyroid peroxidase antibodies, positive thyroglobin antibodies or positive thyroid stimulationg hormone receptor antibodies
	Exclusion: congenital hypothyroidism, negative thyroid antibodies, IgA deficiency
	287 of 668 patients consented but 71 dropped out before study completing and 13 were excluded because of negative antibodies and 1 because of IgA deficiency, leaving 302 patients remaining
	Age from 3.1 to 24.9 years (most were 17 years old or less) 238 female, 64 male 24 had comorbidities (13 with T1DM, 10 with Down's syndrome, 2 with Turner syndrome; 1 had both T1DM and Down's syndrome)
Control	none
Details of coeliac testing	Total IgA tTG-IgA Biopsy if positive tTG-IgA
Results	2.4% (7/302) had biopsy-confirmed CD4.6% (14/278) had positive serology (13 had biopsy but one did not consent to biopsy)Excluding those with comorbidities, the prevalence of CD was 1.3% which authors say is similar to the rate in the general population
Source of funding	Not reported
Conflicts of interest	Not reported
Comments	

Definitions of abbreviations are given at the end of this document.

Bibliographic reference	Sategna-Guidetti C et al. (1998)
Study type	Case control
Study quality	 The Joanna Briggs Institute Prevalence Critical Appraisal Tool (http://ijhpm.com/article_2870_607.html) Was the sample representative of the target population? YES Were study participants recruited in an appropriate way? NO – Unclear is consecutive sample recruited Was the sample size adequate? YES Were the study subjects and the setting described in detail? YES Was the data analysis conducted with sufficient coverage of the identified sample? YES

	 Were objective, standard criteria used for the measurement of the condition? YES Was the condition measured reliably? YES Was there appropriate statistical analysis? YES Are all important confounding factors/subgroups/differences identified and accounted for? YES Were subpopulations identified using objective criteria? NA Overall risk of bias = MODERATE
Country	Italy
Number of patients	N=152 autoimmune thyroid diseases N=185 with coeliac disease N=170 control
Study population	Inclusion: consecutive patients at a thyroid outpatients clinic none of who were taking medications that could interfere with the immunological response, N=100 with Graves' disease, N=52 autoimmune throiditis/ subclinical hypothyroidism/euthyroidism, N=128 female, ages 15 to 80yrs Consecutive patients attending a coeliac disease outpatients, N=53 (N=41 female, median age 36yrs, range 19 to 67yrs) newly diagnosed therefore untreated, N=132 (N=89 female, median age 37yrs, range 16 to 81yrs) on GFD
Control	healthy volunteers
Details of coeliac testing	
Results	EMA and biopsy +ve N=5/152 (3.29%) of those with autoimmune thyroid diseases Autoimmune thyroid disease identified in N=38/185 (20.54%) of those with coeliac disease vs. N=19/170 control group (11.17%), X2 =5.09, p=0.02, the prevalence of autoimmune thyroid diseases among patients and controls did not differ among age groups
Source of funding	Not reported
Conflicts of interest	
Comments	

Definitions of abbreviations are given at the end of this document.

Bibliographic reference	Spadaccino et al. (2008)
Study type	Cross-sectional survey
Study quality	The Joanna Briggs Institute Prevalence Critical Appraisal Tool (http://ijhpm.com/article_2870_607.html)
	1. Was the sample representative of the target population? YES
	2. Were study participants recruited in an appropriate way? NO – Unclear is consecutive sample recruited

	 Was the sample size adequate? YES Were the study subjects and the setting described in detail? YES Was the data analysis conducted with sufficient coverage of the identified sample? YES Were objective, standard criteria used for the measurement of the condition? YES Was the condition measured reliably? YES Was there appropriate statistical analysis? YES
	 9. Are all important confounding factors/subgroups/differences identified and accounted for? YES 10. Were subpopulations identified using objective criteria? NA Overall risk of bias = MODERATE
Country	Italy
Number of patients	N=271 patients with autoimmune thyroid disease
Study population	Inclusion: patients with autoimmune thyroid disease (181 chronic thyroiditis, 90 with Graves' disease)
	5 patients with chronic thyroiditis already had known CD and were on a GFD so were not included here Patient characteristics below include the 5 patients who already had known CD and were on a GFD (otherwise, these patients were not
	included in this evidence table) Mean age 42.6 years (range 12-89); 269 adults and 7 children 246 females, 41 males
	141 had 2 or more clinical autoimmune diseases and depicted autoimmune polyglandular syndromes
Control	none
Details of coeliac testing	IgA-tTGA (ELISA, QUANTA Lite, Inova Diagnostics Inc., San Diego, USA; < 20 U were considered normal) All were tested for IgA levels IgG AGA (ELISA, Giandin IgG, QUANTA) EMA-IgA using indirect immunofluorescence Biopsy – graded with Marsh criteria
Results	 1.8% (5/276) had biopsy confirmed CD 4 had chronic thyroiditis 1 had Graves' disease (10 patients were positive for coeliac –related antibodies)
Source of funding	Not reported
Conflicts of interest	Not reported

Comments

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