

Publication**Autoantibodies against complement C1q correlate with the thyroid function in patients with autoimmune thyroid disease****JournalArticle (Originalarbeit in einer wissenschaftlichen Zeitschrift)****ID** 1193277**Author(s)** Potlukova, E; Jiskra, J; Limanova, Z; Kralikova, P; Smutek, D; Mareckova, H; Antosova, M; Trendelenburg, M**Author(s) at UniBasel** [Trendelenburg, Marten](#) ;**Year** 2008**Title** Autoantibodies against complement C1q correlate with the thyroid function in patients with autoimmune thyroid disease**Journal** Clinical and experimental immunology**Volume** 153**Number** 1**Pages / Article-Number** 96-101**Keywords** anti-C1q antibodies, complement, Graves' disease, Hashimoto's thyroiditis

Autoantibodies against complement C1q (anti-C1q) have been well described in patients with systemic lupus erythematosus, where they correlate with the occurrence of severe lupus nephritis. However, data on anti-C1q in organ-specific autoimmune diseases are scarce. In order to determine the prevalence of anti-C1q in patients with autoimmune thyroid disorders (AITD) and a possible association with thyroid function, we measured prospectively anti-C1q in 23 patients with Graves' disease (GD) and 52 patients with Hashimoto's thyroiditis (HT). Anti-C1q levels were correlated with parameters of thyroid function and autoantibodies against thyroperoxidase, thyroglobulin and thyroid stimulating hormone (TSH) receptor. Twenty-one patients with multi-nodular goitre and 72 normal blood donors served as controls. We found elevated concentrations of anti-C1q more frequently in patients with AITD than in controls: seven of 23 (30%) patients with GD and 11 of 52 (21%) patients with HT, compared with one of 21 (5%) patients with multi-nodular goitre and six of 72 (8%) normal controls. Anti-C1q levels did not correlate with thyroid autoantibodies. However, in GD absolute levels of anti-C1q correlated negatively with TSH and positively with free thyroxine (FT4) and triiodothyronine (FT3). In contrast, in HT, anti-C1q correlated positively with TSH levels. No correlation between TSH and thyroid autoantibodies was found. In conclusion, we found an increased prevalence of anti-C1q in patients with AITD and their levels correlated with the thyroid function in both GD and HT. This correlation seems to be independent of thyroid autoantibodies. Therefore, anti-C1q might point to a pathogenic mechanism involved in the development of AITD that is independent of classical thyroid autoantibodies.

Publisher Blackwell**ISSN/ISBN** 0009-9104**edoc-URL** <http://edoc.unibas.ch/dok/A6003520>**Full Text on edoc** No;**Digital Object Identifier DOI** 10.1111/j.1365-2249.2008.03670.x**PubMed ID** <http://www.ncbi.nlm.nih.gov/pubmed/18505435>**ISI-Number** WOS:000256536700013**Document type (ISI)** Journal Article