**SUMMARY**

**Purpose:** To investigate the occurrence of and risk factors for autoimmune thyroid disease in atrophic body gastritis patients.

**Methods:** Cross-sectional study on 401 consecutive outpatients with atrophic body gastritis. Diagnostic work-up of thyroid disease was completed in 319 atrophic body gastritis patients (225 women, median age: 55.5 years, with a range from 17 to 95 years). Data on anagraphics, lifestyle, family history, and biochemical and histological items were obtained at baseline, and associations between atrophic body gastritis and autoimmune and non-autoimmune thyroid diseases were explored through descriptive statistics and logistic regression analyses.

**Results:** Of the 319 atrophic body gastritis patients, 169 (53%) had an associated thyroid disorder, and 89 (52.7%) of these were unaware of it. The thyroid disease was autoimmune in 128 patients (75.7%) and non-autoimmune in 41 patients. Logistic regression showed that risk factors for having autoimmune thyroid disease in atrophic body gastritis patients were female sex (odds ratio [OR] 5.6, 95% confidence interval [CI], 2.6-12.1), presence of parietal cell antibodies (OR 2.5, 95% CI, 1.1-5.5), and presence of metaplasic atrophy (OR 2.2, 95% CI, 1.0-5.0).

**Conclusion:** Autoimmune thyroid disease and atrophic body gastritis occur in a closely linked fashion, suggesting that atrophic body gastritis patients should be investigated for an occult autoimmune thyroid disease, in particular women and those with positive parietal cell antibodies.

**COMMENT**

Atrophic body gastritis is a chronic often asymptomatic disorder affecting the corporal mucosa, characterized by loss of chlorhydric acid production and intrinsic factor. Atrophic gastritis is epidemiologically linked to the development of gastric adenocarcinoma and carcinoid type 1, and is frequently associated with pernicious anemia.

The association of atrophic gastritis and thyroid disorders has been known for many years. In the 3rd edition of the textbook “the Thyroid” published in 1971 (Eds: Sidney Werner & Sidney Ingbar), it was already quoted that ‘the association between myxedema & vit. B12 deficiency, directly mediated by lack of gastric intrinsic factor, derives from underlying progressive atrophic gastritis; furthermore, in about 1/3 patients with Hashimoto or primary myxedema, gastritis is associated with complement-fixing antibodies directed against gastric parietal cells’ (pp 787-788).

In present study, the authors showed that more than half the patients with atrophic body gastritis (169/319; 53%) had thyroid disease. Of the 169 patients with atrophic gastritis, 80 (47.3%) were aware of having some sort of thyroid disease. The
remaining cases (52.7%) were unaware of a possible thyroid disorder. Overall in the 169 patients with atrophic gastritis and thyroid disease, a majority (76%) had autoimmune thyroid disease (AITD). AITD was associated with female sex and positive parietal cell antibodies. In contrast, classical features of autoimmune gastritis, such as pernicious anemia, were not significantly associated with AITD. The authors recommended that patients with atrophic body gastritis should be assessed for occult AITD. Perhaps ... and even probably. However for us, the question is: is the converse true? Most epidemiologic data seem to indicate that among patients with chronic AITD, about 10% also have pernicious anemia. Based on the present findings, it is plausible that many more patients with AITD could also – potentially – have early stages of atrophic gastritis. Thus, this writer wonders whether searching more systematically for such an association among our many patients with AITD is justified. It is possible that we, endocrinologists, tend to overlook this potential association, especially in older patients, and do not pay sufficient attention to their often vague and little-specific digestive complaints. (Daniel Glinoer, M.D.; Ph.D.)

See Figure

![Study design. ABG = atrophic body gastritis.](image)