Chapter 1.3
Thyroid peroxidase antibodies in rheumatoid arthritis

1.3A Increased prevalence of antithyroid antibodies in rheumatoid arthritis patients with a low prevalence of hormonal alterations

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TO THE EDITOR

We have read the interesting work of Dr. Atzeni and colleagues who found an increased prevalence of anti-thyroid antibodies in rheumatoid arthritis (RA) patients with a low prevalence of hormonal alterations. Moreover, they observed no differences in clinical and serological data between anti-thyroid positive and negative patients.(1) In view of the low prevalence of thyroid disorders they advised against screening for thyroid disorders in patients with RA.

We recently assessed thyroid function at baseline, as part of an ongoing prospective cohort study on cardiovascular mortality and morbidity in more than 350 patients with RA, aged between 50 – 75 years.(2)

We observed that 6.8% of the women had clinical hypothyroidism, which is threefold enhanced in comparison to the general Dutch population and subclinical hypothyroidism was detected in only 2.5% of the female RA patients. This latter can be explained by the disease pyramid theory, i.e. that the progression from preclinical to clinical thyroid disease is accelerated by an older age and higher titres of antibodies for thyroid peroxidase (TPOab), which might be induced by inflammatory diseases like RA.(3) It is therefore of interest to know whether the patients with either subclinical hypothyroidism or Hashimoto's thyroiditis in the work of Atzeni et al. had higher titres of TPOab's or higher inflammation markers. The patients in the study of Atzeni et al. were younger (mean age 47 years) and had a shorter disease duration (mean duration 4.66 years) compared to our study (mean age 63.2 years and mean disease duration 7.4 years, respectively), which may explain the lower prevalence of (sub)clinical dysthyroidism despite an increased prevalence of anti-thyroid antibodies.(2)

Moreover, we found an odds ratio of 4.1 (95 % C.I.: 1.2-14.3) for cardiovascular disease (CVD) comparing female hypothyroid RA patients with female euthyroid RA patients indicating a four times higher risk for CVD in female hypothyroid RA patients in comparison with female euthyroid RA patients.

Therefore, we feel that it is warranted to consider screening for thyroid disorders in female RA patients.
REFERENCES


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