ANCA in Graves’ Disease – Is it Anti-Thyroid Medication-Induced?

Sir,

The article by M M Mehndiratta, et al,1 entitled “Carbimazole-induced ANCA positive vasculitis” was informative.1 However, in this case during both episodes steroids have been used. Further, during the first episode the condition improved despite continuing the probable offending drug. Graves’ disease itself is an autoimmune disease and autoantibodies other than thyroperoxidase antibodies are not totally unexpected. Though the study by Sera et al, did not find increased anti-MPO titres in untreated patients, studies that have found increased anti-MPO titres in untreated patients need to be mentioned. Gumà M, et al2 have found that 67% of patients with Graves’ hyperthyroidism show positive ANCA before medical treatment, which points to a relationship with the autoimmune disease itself. The detection of antineutrophil antibodies in Graves’ disease with and without antithyroid medications is known for quite some time.4 Thyroid microsomal antigen (mostly thyroperoxidase) and human myeloperoxidase share 44% amino acid sequence homology and cross-reactivity between thyroid microsomal antigen and human myeloperoxidase has been suggested to be an explanation of this phenomenon.5 However, later studies5-7 have discounted this possibility implying that truly elevated anti-MPO titre is present in untreated patients with Graves’ hyperthyroidism.

E Benjami Samraj Prakash
Associate Professor, School of Medicine, AIMST University, 31/2, Bukit Air Nasi, Jalan Bedong Semeling, 08100 Bedong, Kedah Darul Aman, West Malaysia.
Received: 21.10.2008; Revised: 6.2.2009; Accepted: 6.3.2009

References

Reply from the Author

Sir,

We thank Dr. Benjamin SPE for showing interest in our case report entitled “Carbimazole-Induced ANCA Positive Vasculitis” published in October 2008 issue of JAPI (J Assoc Physicians India 2008;56:801-803).

We have diagnosed our case as drug (carbimazole) induced vasculitis as arthritis and skin rash are not features of Graves’ disease. In Graves’ disease osteopenia and proximal muscle weakness may be seen.1 Our patient developed arthritis and skin rash only after he was given carbimazole. During the first episode the condition improved but patient took the treatment only for 3 weeks and it has been seen that carbimazole-induced vasculitis may be seen after taking the drug for weeks to months. Apart from long-term use, repeated use of antithyroid medication is also a risk factor for developing this disease.2 Steroid was given in our patient as in spite of removing the offending drug patient was very symptomatic. We agree that increased anti-MPO titres may be seen in untreated patients, but in our patient titre normalized after stopping the offending drug.

MM Mehndiratta
Professor of Neurology and Head Unit II, Department of Neurology, GB Pant Hospital, New Delhi 110002
Received: 26.11.2008; Accepted: 6.3.2009

References