Coexistence of autoimmune diseases and autoantibodies in patients with myasthenia gravis

Autoimmune disorders are on the rise globally and as a group affect 8.5% of the population worldwide.[1] Even as the numbers increase, they often remain unrecognized and untreated particularly in the developing world. This adds to chronic morbidity and impaired quality of life in these patients. The statistics for multiple sclerosis (MS), a typical example of a central nervous system autoimmune disorder, proves this point. It has tripled in European countries over the last 50 years and has increased more than 8 times over the past two decades in India.[2]

Autoimmune diseases coexist with a prevalence rate greater than expected by chance within individuals and in families.[3] This may be consequent to shared environmental as well as genetic factors or the combined influence of both these factors. Genome-wide association studies have shown several loci with the association for more than one autoimmune disorders.[4] There may be shared pathways for T-cell and B-cell activation and cytokine signaling. This shared association is reflected in many common features such as increased prevalence among women, production of autoantibodies, and clustering of specific disorders together. Thus, MS, systemic lupus erythematosus (SLE), and autoimmune thyroid disorder (AITD) cluster together. In this issue of the journal, a similar example has been shown with myasthenia gravis (MG), which may coexist with AITD, rheumatoid arthritis (RA), and SLE. The authors of this paper titled "Coexistence of autoimmune diseases and autoantibodies in patients with myasthenia gravis" have highlighted some of the salient features particularly its occurrence among the female patients and in those with an early onset of anti-acetylcholine receptor antibody seropositive MG.[5] It is important to remember that although autoimmune disorders can predate the onset of MG, it often manifests during the course of the neurological illness, mandating a strict vigilance during the follow-up of these patients. In relation to MG, thyroid disorders are the most common coexisting conditions and manifest either as thyroid deficiency or excess.

Screening for associated autoimmunity is, therefore, mandatory when the index case has an autoimmune disorder. The mere presence of autoantibodies for other disorders does not change the primary label of the disease until there is clinical/hormonal/biochemical manifestation of the disease. Even when there is another concurrent disease, treatment is most often common, as in the case of MG associated with RA or SLE.

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