Analysis of the stathmin rs182455 single nucleotide promoter polymorphism in patients with multiple sclerosis.

Stathmin, a steroid-responsive regulatory protein of oligodendrocyte migration and survival, is highly expressed in active brain lesions of patients with multiple sclerosis (MS) and probably involved in myelin degeneration and repair. Here, we analyzed a single nucleotide polymorphism (rs182455) within the stathmin promoter that is close to a putative steroid-responsive element and has a high minor allelic frequency, in 647 clinically well characterized MS patients and 519 healthy controls. Allelic frequencies were comparable between MS patients and healthy controls. Furthermore, disease course (relapsing-remitting versus secondary progressive versus primary progressive), age of onset or progression index did not convincingly differ between genotypes. We conclude that despite potential importance of stathmin in the pathogenesis of MS, the rs182455 polymorphism does not influence MS susceptibility or clinical disease course.