(S108) USE OF NATALIZUMAB IN HISPANIC PATIENTS WITH RELAPSING MULTIPLE SCLEROSIS

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**Background:** Several epidemiological factors play a role in multiple sclerosis (MS) disease frequency, particularly genetic susceptibility. MS prevalence in the Hispanic population has apparently increased in the last 20 years, according to US and Latin American studies. In 19 Texas counties, Hispanics were the third most common group affected by MS, with a prevalence of 11 in 100,000. Immunomodulatory treatments have demonstrated efficacy in treating relapsing MS. Natalizumab has been shown to reduce the relapse rate and progression of disability in relapsing MS. However, little information is available regarding inter-racial variability in treatment response, particularly in Hispanics. **Objectives:** To describe disease characteristics and treatment efficacy of natalizumab in Hispanic patients with relapsing forms of MS. **Methods:** A review of medical records of MS patients on natalizumab at Maxine Mesinger MS Comprehensive Care Center. **Results:** Of the 142 patients receiving natalizumab, 8 were Hispanics. The ratio of female to male and relapsing-remitting MS (RRMS) to progressive relapsing MS (PRMS) was 7:1. The mean age at the first attributable symptom was 25.5 years. Disease presentation leading to diagnosis was as follows: 2 of 8 central nervous system involvement, 5 of 8 limb weakness, and 1 of 8 paresthesias. Five patients had been on more than two disease-modifying therapies (DMTs) prior to natalizumab, and 3 had received chemotherapy. The mean disease duration prior to therapy was 9.8 years, and a mean of 19.25 natalizumab doses were given. The median annualized relapse rate before natalizumab treatment was 0.75 and after treatment was 0. The patient with PRMS experienced one relapse after the fifth dose. Follow-up magnetic resonance imaging (MRI) showed two new T2 lesions in three patients, and no gadolinium-enhancing lesions were detected. **Conclusions:** Recent reports found a similar response to natalizumab in the Hispanic population compared with the overall study groups. In our case series, natalizumab prevented 7 of 8 (87.5%) patients from relapsing in a mean follow-up of 19 months (4–37 months). MRI T2 lesions remained stable in 5 of 8 (62%) patients, and no gadolinium-enhancing lesions were documented. Our observations have limitations; however, the response to natalizumab in our Hispanic patients was comparable to that seen in the original trials.

**Disclosure:** Nothing to disclose

**Keywords:** disease-modifying treatment in MS