MULTIPLE SCLEROSIS IN AFRICAN AMERICANS: A COHORT FROM SOUTHEAST TEXAS

Suarez GA, Landero S, Jafree I, Hutton G, Rivera VM

Introduction: Multiple Sclerosis affects mainly Caucasians from the northern latitudes and high socio-economical status. African American(AA) generally have onset of symptoms at a later age, have a more severe form of the disease and may have less access to therapy(1-4)). The relative risk for developing MS in this population in comparison with Caucasians is 0.64(5). This may be explained by different genetic and environmental factors(6). Additional observations addressing these issues are needed.

Objectives: To assess age of onset, time between onset of symptoms and initiation of treatment, severity of initial symptoms and progression of the disease in AA.

Materials and Methods: We retrospectively identified AA subjects from the database of the Maxine Mesinger MS clinic in Houston and looked for the characteristics and description of the disease in this population.

Results: Of 110 AA with MS 89% were females, with a female:male ratio of 6.8:1. 64% had disease onset between the third and forth decades of life (fig.1).The initial presentation of the disease was Relapsing-Remitting (RR) in 96%, 1% Primary Progressive, 1% NMO and 2% are still diagnosed as Clinically Isolated Syndrome (CIS). Of those with relapse onset, 16% now have the Secondary Progressive form. The most frequent symptoms (Fig. 2) presented during onset were sensory(24%), spinal(24%) and Optic Neuritis(20%).

Fig. 1. Age of onset

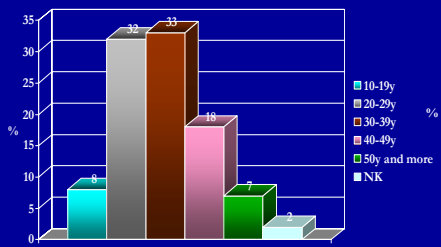
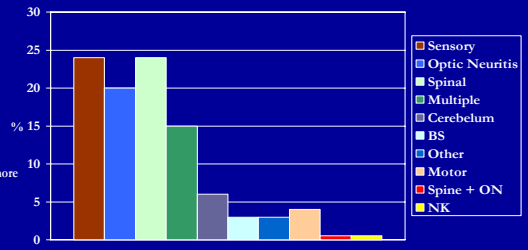


Fig. 2: Symptoms at onset



More than 60% of our subjects began disease modifying therapy for MS within the first year after the onset of symptoms(Fig.3) and 85% are receiving therapy at the present time(Fig.4). Of the patients receiving therapy, most of them are on Interferons(64%) and among those, Interferon Beta-1a the most frequently prescribed(46%).

Fig. 3. Time from diagnosis to start of therapy

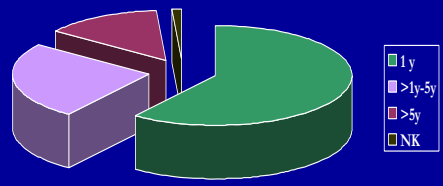
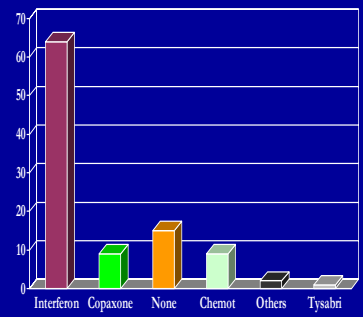


Fig. 4. Therapy



Conclusions:We found some different behavior in our AA patients compared with the previous studies. These differences include a higher ratio of affected females, a lower frequency of PP disease, a shorter time latency to therapy initiation after diagnosis and a relatively higher proportion receiving treatment. We also found some similarities in the age of onset of symptoms, anatomic site at the onset of the disease and time to diagnosis after the initial symptom.

References:

1. Marrie RA, Cutter G, Tyry T, et al. Neurology 2006;66:1235.
2. Cree BAC, Kahn O, Bourdette D, et al. Neurology 2004;63:2039.
3. Kaufman J, Johnson SK, Moyer D, et al. Am J Phys Med Rehabil 2003;82:582.
4. Merle H, Smadja D, Merle S, et al. Eur J Ophthalmol 2005;3:392.
5. Mitchell W, et al. Ann Neurol 2004;55:65.
6. Buchanan RJ, Martin RA, Wang S, et al. Mult Scler 2004;10:660