Rapid disease course in African Americans with multiple sclerosis.

OBJECTIVE: To investigate utility of a Multiple Sclerosis Severity Scale (MSSS)-based classification system for comparing African American (AA) and white American (WA) multiple sclerosis (MS) subpopulations in the New York State Multiple Sclerosis Consortium (NYSMSC) database. MSSS is a frequency-rank algorithm relating MS disability to disease duration in a large, untreated reference population. Design/

METHODS: Distributions of patients in 6 MSSS-based severity grades were calculated for AA and WA registrants.

RESULTS: There were 419 AA and 5,809 WA patients in the NYSMSC, who had EDSS recorded during years 1-30 since symptom onset. Median EDSS was not different in AA and WA (3.5 vs 3.0, p = 0.60), whereas median MSSS in AA was higher than in WA (6.0 vs 4.8, p = 0.001). AA patients were overrepresented in the 2 most severe grades (41.5% vs 29.3% for WA) and underrepresented in the 2 lowest grades (23.4% vs 35.4%; p < 0.001). In multivariable analysis (ordered logistic and median regression), MSSS for AA remained significantly higher than in WA after adjusting for age, gender, disease duration, disease type distribution, and treatment with disease-modifying therapies.

CONCLUSIONS: The 6-tiered MSSS grading
system is a powerful tool for comparing rate of disease progression in subpopulations of interest. MSSS-based analysis demonstrates that African ancestry is a risk factor for a more rapidly disabling disease course.

DOI 10.1212/WNL.0b013e3181e8e72a
Alternate Journal Neurology
PubMed ID 20644149