Asian Over-Representation Among Patients with Hemifacial Spasm

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BACKGROUND

Hemifacial spasm (HFS) is a common movement disorder, but its prevalence in different populations has not been elucidated. A retrospective review of all patients with HFS currently followed at the Baylor College of Medicine Movement Disorders Clinic and compare their demographic and clinical data with a control group of patients with cranial-cervical dystonia (CD). In contrast to patients with CD (N=145, mean age 48.64±13.61 years), of whom 117 (80.69%) were Caucasians, 13 (9.87%) Hispanic, 10 (7.06%) African-American, and 5 (3.45%) were of Asian origin, there were 81 (61.36%) Caucasians, 24 (18.18%) Hispanic, 13 (9.85%) African-Americans, and 14 (10.61%) Asians in the HFS group (N=132, mean age 49.33±13.25 years). Although there was no significant difference in the age and gender distribution between the two groups, the frequency of HFS in HFS group was 3.1 times higher than that in CD group (P<0.01). Furthermore, the prevalence of Asians among patients with HFS was nearly twice the estimated prevalence of Asians in general Houston population (5.48%). Our results support the observation that HFS is much more common in the Asian population than in other populations. Further epidemiological, genetic, imaging and anatomic studies are needed to understand the apparent difference in the prevalence of this peripherally induced movement disorder.

RESULTS

We reviewed all medical records of patients evaluated at Baylor College of Medicine Movement Disorders Clinic between January 1, 2009 and December 31, 2009 and identified 277 patients with HFS or CD. Demographic and clinical characteristics were compared among Caucasian, African-American, Hispanic and Asian patients using T-Test (age) and Chi-squared test (gender). Mantel-Haenszel Chi Square test was used to analyze the ethnic/racial distribution of HFS and CD in the various populations. All analyses were performed using SAS 6.22.

The main demographic features of both groups (HFS and CD) are presented in Table 1. Of the HFS (N=132, male/female=50/82, mean age 49.33±13.25 years) patients, 61.36% were Caucasians, 9.85% were African-American, 18.18% were Hispanic, and 10.61% were of Asian origin while the relative frequencies of the CD (N=145, male/female=46/99, mean age 48.64±13.61 years) patients were as follows: 80.69% Caucasians, 6.90% African-American, 10.61% Hispanic, and 3.45% Asian. There is significant difference in ethnic/racial distribution between two groups (P<0.0008), but there was no significant difference in the age or gender.

The frequency of Asians in HFS group (10.61%) is 3.1 times higher than that in the CD group (3.45%) (Fig 1) and nearly twice higher than the frequency of Asians in the general Houston population (Asian/total by race in Houston=10,850,203,686,54.8%).

REFERENCES


ACKNOWLEDGEMENT

This work was supported by Diana Helis Henry Medical Research Foundation (2007-2010) and Carolyn Weiss Law seed funding, partially supported by NIH of the Clinical Center for the Study of Neuroprotection from PD (5U10NS044441-07).

We also thank the National Parkinson Foundation of their support of the NPP Center of Excellence at Baylor College of Medicine.

We are also thankful Rupesh Koshy for providing ethnic/race data for City of Houston as taken from the American Community Survey Estimate for the year 2008.