SPONTANEOUS REMISSION IN HCV-EXPOSED AFRICAN-AMERICAN AND HISPANIC IV DRUG USERS TESTED IN 2018-2019

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Background: Many factors affect the outcome of HCV infection, including gender, age, ethnicity, intravenous drug use, HIV-associated immune deficiency, and others. The strongest predictor of spontaneous remission or treatment response is genetic and related to a specific polymorphism (CC) in the IL28B gene (rs12979860). The allelic frequency varies widely with race being most prevalent in East Asians and least prevalent in Africans and African-Americans. There are few published data on Caribbean Hispanics but they suggest a lower allelic frequency than in East Asians or Caucasians, though higher than in Africans or African-Americans. We determined the prevalence of spontaneous remission in African-American and Hispanic people undergoing HCV serotesting in non-medical settings in the Bronx, NY.

Method: HCV serotesting was performed using Orasure. Data were collected on demographics and IV drug use. Informed consent, HIPAA authorization, and IRB approval was obtained. Serotesting was followed by confirmation of active infection (quantifiable HCV RNA) in a clinical laboratory.

Results: 68 subjects were studied: 49 men and 19 women; 46 Hispanic, 22 African American. All admitted to prior IV drug use. Spontaneous remission was documented in 29 subjects (42.6%) while a quantifiable viral load or successful treatment were found in 36 and 3, respectively. Spontaneous remission was found in 43.5% of the Hispanic and 40.9% of the African-American subjects.

Discussion: The spontaneous remission rates reported here are much higher than in studies performed in inner city cohorts in the past. The reason is uncertain. We hypothesize that it is associated with a higher allelic frequency of the CC genotype. If confirmed by further testing, these data would suggest that epidemiologic studies using seropositivity alone may overestimate the prevalence of active infection. Furthermore, the enrichment of people with spontaneous remission may reflect the influence active HCV infection on cumulative mortality.