Hispanic ethnicity and survival in pediatric acute lymphocytic leukemia (all) patients in Florida

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Conflictos de interés: Los autores declaran no tener conflictos de interés alguno.

Abstract

Introduction: Pediatric cancer mortality rates have drastically declined according to analyzed population-based surveillance data; however, incidences of most childhood cancers continue to rise. Recent studies have indicated an association between ethnicity/race and cancer survival. Florida’s ethnically/racially diverse population and surging pediatric cancer incidence characterize the state as an ideal setting to study the association between ethnicity/race and pediatric cancer survival. Objective: To determine whether or not an association exists between Hispanic ethnicity and cancer survival in a Floridian population of pediatric patients with Acute Lymphocytic Leukemia (ALL). Methods: We will use data from participants 18 years or younger of Florida Cancer Data System (FCDS). Cox-proportional hazard regression was used to assess independent association between Hispanic ethnicity and time to death (time interval from diagnosis of ALL to the last patient contact, as recorded in the database). Survival status (death or alive) was assessed at the date of last contact. Those who are alive at last contact were then censored. Results: In the unadjusted model, ethnicity was not associated with risk of death (HR = 0.87, 95% CI=0.73 - 1.04). After adjustment for sex, race, age at diagnosis, insurance status, geographic area, and immunophenotype) the results showed again no association between Hispanic ethnicity and survival (HR = 1.19, 95% CI=0.82 - 1.72). Conclusions: We found no evidence for differences in survival based on ethnic status. Potential difference in racial-survival disparities in pediatric ALL within various geographic regions might depend on Hispanic ancestries or cancer type. Further research on the topic is still deemed necessary as to clarify the nature of the association between ethnicity and cancer survival.

Keywords: acute lymphocytic leukemia; Florida; pediatric

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