Abstract

Introduction. Cystic fibrosis is one of the most common autosomal recessive disorders in European descendants. Geographic distribution of CFTR gene mutations vary worldwide. Objective. To determine the degree of isonymy in a sample of parents with cystic fibrosis kids. Materials and methods. Observed and expected isonymy as well as endogamy components (Fr, Fn, Ft, and the values a and B) were calculated in the parents of cystic fibrosis kids. These parameters were calculated for both the total population Antioquia and for the subpopulation East in Antioquia. Results. 35 parent couples of cystic fibrosis kids from Antioquia were analyzed. The values obtained for Fr, Fn, Ft, a and B were 0.01, 0.007, 0.019, 268 and 0.44, respectively for the total population Antioquia. For the subpopulation East the values obtained were 0.026, 0.0017, 0.027, 135 and 0.62. The most frequent lastnames in the total sample (n=70) were Gómez (6%), Alzate (4%) and González (3.7 %), whilst for East subpopulation (n=32) were Gómez (8%) and Marín (6%). Conclusions. Our results suggest a high percentage of last-names shared, which is reflected in the isonymy values. Similarly, the presence of a reduced number of last-names in an important percentage of the population is reflected in the Fr values obtained for both analyses, which suggest homogeneity. Thus, it is expected a low number of CFTR mutations in the children from Antioquia with cystic fibrosis.

Keywords

Cystic fibrosis, names, inbreeding