

Amerindian admixture estimation based on serological and molecular methods

Estimadores de mezcla Amerindia basados en métodos serológicos y moleculares

Pulgar-Alarcón, Iván

Fuentes-Guajardo, Macarena

Llop, Elena

Rothhammer, Francisco

© 2015, Sociedad Medica de Santiago. All rights reserved. Background: Amerindian admixture is an important parameter to consider in epidemiological studies in American countries, to make a proper selection of cases and controls. Aim: To compare Amerindian admixture estimates obtained using ABO*O and ABO*A blood group alleles and ancestral identity markers (AIMs) in the mixed Chilean population. Subjects and Methods: Amerindian admixture rates were determined in 720 Chilean volunteers residing in Arica and born in the 15 regions of the country, using ABO*O and ABO*A alleles and 40 AIMs selected from more than 500,000 single nucleotide polymorphisms (SNP's). Results: Mean admixture estimates obtained using ABO*O and ABO*A alleles and AIM's were 35, 47% and 48% respectively. There was concordance in estimates, with the exception of the admixture based on ABO*O allele and AIMs. Conclusions: In Chile, Amerindian admixture estimates obtained using ABO*A could be used as an alternative to AIM