

Serum butyrylcholinesterase variants in Santiago Eastern District population

Variantes de butirilcolinesterasa sérica en población de Santiago Oriente

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Background: Succinylcholine causes prolonged apneas in a proportion of subjects that have a genetic defect of butyrylcholinesterase, due to the presence of unusual alleles in the locus BCHE.

Aim: To estimate allele frequencies of three variants of serum butyrylcholinesterase, BCHE*U, BCHE*A and BCHE*F in an urban population of Santiago, Chile. Subjects and methods: Different phenotypes for the locus BCHE were determined in 300 blood samples coming from patients of a private clinical laboratory. The population was formed by an admixture of Amerindian and European (mostly Spanish) people. Results: The frequency of BCHE*A was similar to that expected for this population, but BCHE*F frequency was greater than predicted. Eight subjects had the genotype BCHE AK. Conclusions: The higher frequency found for BCHE*F is probably due to the use of more precise detection techniques. Although the used method cannot distinguish BCHE UK from BCHE UU, the finding of individuals with BCHE AK, must lead