

彝族、藏族与哈尼族血清胆碱酯酶的遗传多态性*

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摘要 按照Kalow等的方法对中国3个人群的血清胆碱酯酶(简称ChE)的遗传多态性进行了研究。3个人群是四川省布拖县彝族(197人)、西藏自治区拉萨市藏族(100人)及云南省元江县哈尼族(170人)。根据每一个体的地布卡因值和氟化钠值,按Motulsky的分型标准进行分型。结果表明,在彝族中有3人属一般型+抗氟化物型(UF);在藏族中有2名UF;在哈尼族中也有3名UF,未发现不典型型(即抗地布卡因型的纯合子与杂合子),也未发现抗氟化物型的纯合子。因此,Ef1基因频率在彝族、藏族与哈尼族中分别为0.0076、0.0100及0.0088。正常的常见等位基因Eu1的频率分别为0.9924、0.9900及0.9912。这3个人群ChE表型分布均符合Hard-Weinberg平衡法则。他们的基因频率与蒙古人种其他人群是一致的。

关键词 [人类群体遗传学,胆碱酯酶,遗传多态性](#)

分类号

The Genetic Polymorphism of Serum Cholinesterase in Yi, Tibetan and Hani Ethnic Groups of Chihua

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Abstract

The genetic polymorphism of serum cholinesterase (E.C.3.1. 1.8, CHE) in three Chinese populations was studied, using methods of Kalow et al. And Harris et al. The three populations are: Yi in Butuo County, Sichuan Province (197 individuals), Tibetan in Lasa City, Tibet, (100 individuals) and Hani in Yuanjiang County, Yunnan Province (170 individuals). Phenotyping was carried out according to the dibucain number and fluoride number of each individual by Motulsky's standard. The result shows that there are three individuals identified as usual type+fluoride-resistant type (UF) in Yi population, two UF individuals in Tibetan, and three UF individuals in Hani people. The homozygote and heterozygote of atypical type(i.e. dibucain-resistant type) have not been found, neither have the homozygotes of fluoride-resistant type. Thus, the E1f gene frequencies in Yi, Tibetan and Hani populations are 0.0076, 0.0100 and 0.0088 respectively, and the common allele E1u frequencies are 0.9924, 0.9900 and 0.9912 respectively. The phenotype distributions of ChE in the three populations fit the Hardy-Weinberg law. The allele frequencies in the three populations are consistent with that of the Mongoloid.

Key words [Human population genetics](#) [Cholinesterase](#) [Polymorphism](#)

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