

The distribution of I/D polymorphism in the ACE gene among Korean male elite athletes.

Oh SD.

The Research Institute for Sports Science, Hanyang University, Seoul, Korea.
sangduk@hanyang.ac.kr

AIM: The aim of this study was to examine the distribution of insertion/deletion (I/D) polymorphism in the ACE gene among Korean male elite athletes. **METHODS:** Participants of the study were 139 Korean male elite athletes (15 basketball, 41 soccer, 31 baseball, 12 gymnastics, 7 volleyball, 8 long-distance running, 8 judo, and 17 ice hockey players). The control group consisted of 163 non-athletes. Polymerase chain reaction method was used to investigate I/D polymorphism of the ACE gene. Collected data were analyzed by SPSS 11.0 program. **RESULTS:** The distribution of genotype and allele frequencies did not indicate the differences between the athletes and controls ($P>0.05$). However, the excess of II genotype and I allele was shown in long distance runners, although it was not statistically significant. **CONCLUSION:** It may be necessary to perform further studies using a homogeneous cohort of subjects from single sporting discipline, because the probable role of I allele in athletic performance has been hard to be detected by heterogeneous groups of diverse sporting disciplines.