

## The relationship between the polymorphism of elastin gene and ruptured intracranial aneurysm

**Authors:** Jingfen Zhang, Xiaohong Deng, Zhihua GE

**Institute:** Department of Neurology, Baotou Central Hospital, Baotou, China

**Corresponding author:** Jingfen Zhang, email address: 1846224761@qq.com

**Objective** To investigate the relationship between the elastin gene(ELN) and the ruptured intracranial aneurysm.

**Methods** This study enrolled spontaneous subarachnoid hemorrhage patients who were consecutively admitted to the Neurology Department of Baotou Central Hospital, between December 2014 and June 2016. The control group was recruited from physical examination population in Baotou Central Hospital, which age and sex matches with case group. Collecting venous blood of the two group cases. Selecting the tag SNP rs2071307 of exon region of elastin gene as the research site. The polymorphism rs 2071307 of elastin gene was identified by polymerase chain reaction and genetic sequencing.

**Results** Polymorphism distribution of elastin gene rs2071307 is existed in Inner Mongolia region population. The distribution of genotypes and alleles showed obvious racial and geographic differences. The difference of genotypes and alleles distribution of the elastin gene was not found between the case group and the control group.

**Conclusion** The distributions of elastin gene rs2071307 genotypes and alleles showed obvious racial and geographic differences. But we found no allelic association between the elastin polymorphism haplotype and sporadic ruptured intracranial aneurysms in Inner Mongolia region population.

**Keywords** Elastin, Polymorphism, Aneurysm, Single nucleotide, Subarachnoid hemorrhage

