

## Gender Specificity of a Genetic Variant of Androgen Receptor and Risk of Coronary Artery Disease

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### Abstract

#### BACKGROUND:

Androgens are known to influence the risk of developing cardiovascular diseases. This study aims at investigating the possible association between G1733A polymorphism in the coding region of androgen receptor (AR) gene and premature coronary artery disease (CAD).

#### METHODS:

A total of 460 Greek subjects were investigated for the G1733A polymorphism. The patient group consisted of 250 CAD individuals, aged less than 58 years, while 210 healthy individuals served as controls. Genotyping was performed using the PCR-RFLP method.

#### RESULTS:

Significant differences in genotype distribution ( $P = 0.0067$ ) and allele frequencies ( $P = 0.0060$ ) have been observed between patients and controls in the women's subgroup. Conversely, the genotype/allele frequencies were similar between patients and controls in the subgroup of men.

#### CONCLUSION:

We may conclude that the G1733A polymorphism of AR gene could be a useful genetic marker for the assessment of a woman's risk for CAD in our Caucasian Greek population.