Int J Hum Genet, 4(3): 201-205 (2004)
PRINT: ISSN 0972-3757 ONLINE: 2456-6360
DOI: 10.31901/24566330.2003/04.03.07

NAT2 Gene Polymorphism in Bladder Cancer: A Study from North India

D.S.L. Srivastava, A. Kumar, B. Mittal* and R.D. Mittal**

****Department of Urology and Genetics, Sanjay Gandhi Post Graduate Institute of Medical Sciences, Lucknow 226 014, Uttar Pradesh, India***

KEYWORDS N-acetyltransferase-2; bladder cancer; tobacco-users; PCR-RFLP; genetic polymorphism

ABSTRACT The relationship between smoking and bladder cancer risk and whether such effect is modified by the variation in NAT2 genotypes is investigated. This case control study was undertaken over a period of 19 months and included 106 bladder cancer patients and 110 controls. The NAT2 genotypes were identified by PCR-RFLP method in peripheral blood DNA samples. Genotype frequencies and the association of the genotypes among patients and controls group were assessed by c2 test and Fisher exact test. The NAT2 phenotypes were not significant in bladder cancer patients (OR=1.18, 95% CI: 0.69-2.03, *P*-value=0.583) alone or in combination with tobacco users (OR=0.84, 95% CI: 0.328-2.125, *P*-value=0.813) when compared with controls. These observations suggest that the NAT2 fast /or slow acetylators genotype is not associated with the risk of developing bladder cancer. Our data further demonstrated that bladder cancer patients who were tobacco users were not susceptible to the risk of developing bladder cancer as no significant association could be established.

Home Back