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POLYMORPHISM OF GSTM1, GSTT1, GSTP1, NATII AND CYP1A1 AND THE SUSCEPTIBILITY TO ASTHMA

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The genetic polymorphism of GSTM1, GSTT1, GSTP1, NATII and CYP1A1 genes among 33 asthma patients and 66 controls were investigated to find the association between the polymorphism and the risk of asthma. The frequency of the GSTT1 null genotype was slightly higher in asthma patients than that in the control, but this difference was not significant. No difference in the frequencies of GSTM1 and GSTP1 was found between patients and control. Excess risk for the combination of null genotype of the GSTT1 and GST P1 was found(O.R.: 3.82, 95%CI: 1.25-11.86). No slow acetylator genotype was found in patients and control, but the frequency of intermediate acetylator genotype was higher in patients(9.1%) than in the control(1.5%).

The presence of the homozygous variant type(M/M) of CYP1A1 led to the increased risk (O.R.: 4.80, 95%CI: 0.92-18.12) for asthma compared to wild type(WT) and heterozygous variant type(W/M).

An increased risk of asthma for the combination of GST null genotype(M/M) and CYP1A1 homozygous variant genotype(M/M) was also found.