

고혈압관리·유전역학				번호: I - H - 4	
제 목	국문	한국인 유방암 발현에 있어서의 IL-1B and IL-1RN 유전자 다형성의 역할			
	영문	The roles of IL-1B and IL-1RN Genetic Polymorphisms in Breast Cancer Occurrence			
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<p>1. Objectives</p> <p>Interleukin-1 (IL-1) is essential mediator of inflammation and immunity, so, could exert either inhibitory or prompting effects on carcinogenesis. A hospital case-control study was performed to assess the potential influence of genetic polymorphisms of IL-1B (T-31C) and IL-1RN (86bp VNTR: variable number of terminal repeats) genotypes on the risk of breast cancer in Korean women.</p> <p>2. Methods</p> <p>Histologically confirmed breast cancer cases (n=513) and controls (n=395) with no present or previous history of breast cancer were recruited from several teaching hospitals in Seoul</p>					

during 1994-2001. Information on demographic characteristics and other informations were collected by interviewed questionnaire. Genotypes of IL-1B and IL-1RN were determined by PCR(polymerase chain reaction)-confronting two-pair primers (CTPP) and PCR respectively. Adjusted odds ratios and 95% confidence intervals were estimated by unconditional logistic regression analysis.

3. Results

The genotype frequencies of IL-1B TT, TC, CC were 29.3%, 46.7%, 24.0% in cases and 22.7%, 55.2%, 22.1% in controls. IL-1B TC or CC genotypes significantly decreased the risk of breast cancer (OR=0.71, 95% CI=0.51-0.99). The genotype frequencies of IL-1RN *4/*5, *4/*4, *3/*4, *2/*4, *2/*2 were 0.6%, 88.9%, 1.0%, 9.0%, 0.6% in cases and 1.0%, 83.6%, 0.5%, 13.9%, 1.0%. IL-1RN *2/*4 or *2/*2 genotypes significantly decreased the risk of breast cancer (OR=0.60, 95% CI=0.39-0.93).

4. Conclusions

Our results suggest that IL-1B and IL-1RN genotypes play important roles in breast cancer development in Korean women.