HLA B*1301 and B*1801 Alleles are Positively Associated with HPV Related Cervical Cancer in Women from Kolkata, Eastern India

Paramita Bhattacharya¹, Umapathy Shankarkumar² and Sharmila Sengupta¹

1. Human Genetics Unit, Indian Statistical Institute, 203, B.T. Road, Kolkata 700 108, West Bengal, India
2. HLA Department Institute of Immunohaematology, 13th Floor, K.E.M. Hospital, Parel, Mumbai 400 012, Maharashtra, India

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ABSTRACT The incidence of cervical cancer is high in Indian women. Human papillomavirus (HPV) infection is known to be the major risk factor for cervical cancer. Further both viral and host genetic factors have been postulated as important determinants. In the present study 31 suspected Indian women were analyzed molecularly for their HPV infection status, cervical cancer and HLA A, B and Cw allele associations. Among the 13 HPV-16 positive women the HLA analysis revealed a positive association for B*1301 and B*1801 alleles and a negative association with B*4006 in the six cervical cancer patients compared with seven histopathologically normal controls. Our study is the first report towards HPV related cervical cancer in Indian women which suggests that HPV type and HLA allele associations are population dependent.