

Association of Genetic Markers with Cervical Cancer

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ABSTRACT Cervical cancer, a malignant neoplasm of the cervix uteri or cervical area is the second most common cause of cancer related deaths among women. This study is to determine whether the biochemical genetic markers are predictive of cervical cancer patients. Blood samples from 50 cervical cancer diseased patients and equal number of age and sex matched healthy individuals with no known history of any disease were taken as controls. In this study five genetic markers - which include Albumin (ALB), Haptoglobin (HP), Transferrin (TF), Caeruloplasmin (CP) and Group Specific Component (GC) were studied. The present study is an attempt to find association between cervical cancer and genetic markers like plasma proteins. For group specific component system, no significant differences were observed between patients and controls (χ^2 : 5.7136; d.f= 2; $0.10 > p > 0.05$), and both the examined groups were in Hardy-Weinberg equilibrium indicating no association between cervical cancer and this protein marker. Regarding haptoglobins, a significant difference in their distribution was observed between patients and controls. This data shows an association of HP 2-2 in patients with cervical cancer. Thus HP system showed significant differences between patients and controls (χ^2 : 7.6284; d.f= 2; $0.05 > p > 0.02$).