Mutation detection in exons 3,10 ,12 of BRCA1 gene

in 30 patients affected with familial breast cancer

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Abstract
Breast cancer is one of the most common cause of death due to cancer in woman. More than half of hereditary breast / ovarian cancer families could be attributed to mutation in breast cancer susceptibility gene BRCA1 . This study was performed on blood samples of 30 women who affected with familial breast cancer. Non- radioactive PCR-SSPC technique was utilized for mutation screening in exons 3,10, 12 of BRCA1 gene . Two shifts in exon 3and also two in exon 12 was detected, but no shift in axon 10 was found .Due to low number of recognized mutations, the statistical analysis didn’t show a meaningful correlation between mutations and pathological characteristics . Results from this study showed that there was a low possibility of germline mutation in these three exons . Low rate of mutation in this report was concordance with the others

Breast cancer , mutation , BRCA1 , PCR-SSCP Key words: