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RETRACTION NOTE

Breast, ovarian and other site cancer patients with BRCA 1/2 mutations: Data from Turkish multicenter retrospective study

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Summary

Purpose: *To demonstrate the clinical and demographic findings of the patients harboring BRCA1/2 mutations with breast, genital tract, prostate and pancreas cancers.*

Methods: *The results of sequencing analysis of 200 cancer patients (190 women, 10 men) who had been directed to genetic counseling with an indication BRCA1/ BRCA2 testing from different regions across 9 medical oncology centers were retrospectively analyzed.*

Results: *A total of 200 consecutive cancer patients who harbored BRCA1/BRCA2 mutation [130 (65%) patients harbored BRCA 1 mutation, and 70 harbored BRCA 2 mutation] were included. Of these, 64.0% had breast cancer, 31.5% had genital cancers, 3.5% had prostate and 1.0% had pancreatic cancers. The age at diagnosis [57 (IQR 50-66) years] of parents who had BRCA mutant cancer was higher than the age of their children who had BRCA mutant cancer [median age 45 (IQR 38-45) years]. BRCA2 carriers with ovarian cancer had favorable survival outcomes. In ovarian cancer patients, progression-free survival longer than 12 months was significantly more frequent in BRCA2 carriers compared with those in BRCA1 carriers.*

Conclusions: *Newly diagnosed BRCA 1/2 carriers with cancers were younger than their parents who harbored BRCA mutation with cancer. The findings from Turkish BRCA 1/2 associated cancer patients suggest that earlier onset of the screening program and genetic counseling of BRCA associated patients and their family members are essential to earlier disease diagnosis and to prevent disease occurrence as well.*

Key words: *BRCA1, BRCA2, breast, pancreas, genital cancers, prostate, pancreas*

Introduction

Every cell has DNA damage response mechanisms that protect the genome against the harmful effects of mutations. DNA double-strand breaks are a very dangerous form of DNA damage and can be repaired by homologous recombination repair which includes breast cancer susceptibility genes

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