Detection of BRCA 1 founder mutation 185DELAG in breast cancer patients using pyrosequencing technique

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Hereditary breast and ovarian cancer due to mutations in BRCA1 and BRCA2 is the most common cause of hereditary forms of both breast and ovarian cancer and occurs in all ethnic and racial populations. Till now, no assessments of the BRCA1 founder mutation have been performed by sequencing in Egyptian population. The aim of this pilot study was to detect the prevalence BRCA1 founder mutation 185DELAG in familial and sporadic breast cancer patients. Blood samples of 100 Egyptian female including 40 patients who had no significant family history of BC in their families (sporadic BC), 40 patients had at least 2 positive family history in their first degree relatives (familial BC), 20 control patients with no BC or history of breast cancer in their families. All subjects went for detection for 185DELAG mutation using Pyrosequencing technique. There were significant differences between familial and sporadic BC as regards their age (P=0.004) and in the premenopausal patients in familial BC than sporadic BC (P=0.02). Moreover, sporadic BC showed a significant increase in the ER&PR +ve, HER2/neu –ve (luminal A) than familial BC patients (P=0.012). As regards the mutation, we found a carrier frequency of 2.5% (95% confidence interval 1.1-2.4). There was no significant relation between mutation and type of BC, or between the hormonal profile of BC tumor and 185DELAG carriers. Conclusion: The prevalence of BRCA1 185AG deletion mutation is significantly lower than previously reported using other molecular techniques.

Homeopathy treatment of chemotherapy-induced nausea and vomiting in breast cancer patients: A randomized controlled trial

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Background: Chemotherapy-induced nausea and vomiting (CINV) is a common, often overlooked adverse effect of cancer treatment. With poor quality of life, CINV can also cause decline in performance status, functional and physiological impairment. An adjuvant is required particularly where full range of antiemetic treatments is not accessible.

Objective: To assess the impact of homeopathy on nausea, vomiting and quality of life in breast cancer patients undergoing chemotherapy.

Design: Double-blind, placebo controlled, randomized was conducted in four centers in Rajasthan, India. The study medication homeopathy or placebos as an adjuvant were administered first three cycles of chemotherapy. VAS nausea score, frequency of vomiting and HRQoL profile was assessed.

Results: Ninety two female patients completed the study. The VAS nausea score was significantly lower in homeopathy compared to placebo during acute phase (P=0.000) and sustained for overall treatment effect (P<0.001). Similarly, there was significant effect of homeopathy on vomiting (P<0.001). A slight significant change from baseline for global health status (P<0.05) was detected in placebo group and homeopathy (P=0.0001). A clinically relevant 10 points improvement on role functioning (P=0.002) and appetite loss (P<0.0001) were also documented while patients were on homeopathy.

Conclusion: Evidence derived from this study is sufficiently convincing that homeopathy is an effective complementary therapy for CINV. The findings for HRQoL were encouraging with significant improvement in several domains.