

IL-18 GENE POLYMORPHISM AND SOME RISK FACTORS IN IRAQI PATIENTS WITH BREAST CANCER

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Abstract

Objective: Breast cancer is the most diagnosed cancer in women, which leads to death in a lot of women with breast cancer. The major risk factors associated with breast cancer risk related to family history, age, clinical history, lifestyle factors, long period hormonal exposure and single nucleotide polymorphisms (SNPs) in many genes showed possible links with breast cancer incidence risk in different people populations. our study aimed to figure out the correlation between smoking, Lodging and family history and other factors with the risk of breast cancer.

Methods: Blood sample from female patients with breast cancer and healthy individuals were collected and subjected to Tetra-amplification refractory mutation system–polymerase chain reaction (T-ARMS-PCR) technique for -607 C/A mutation of an IL-18 gene and SPSS 18 software analyzed the results statically. **Results:** Results showed no association between Lodging and smoking with risk of breast cancer, ($p > 0.05$), while the association between the risk and family history were obvious, ($p < 0.05$). **Conclusion:** The results obtained by (TETRA-ARMS-PCR) technique did not show the association between -607 C/A alternation of IL-18 gene and breast cancer ($P > 0.05$) in the individuals examined in our study .

Keywords: IL-18, Gene, Polymorphism, T-ARMS- PCR, Mutations