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• **Assess of Stromal Cell-Derived Factor-1 (SDF-1) Polymorphism in Sardasht Chemical Victims 25 Years after Exposure to Sulfur Mustard**

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Background: Sulfur mustard (SM) is one of the widely chemical weapons that used during the Iraq- Iran war. SM causes the short and long term complications on different organs. Although the acute effects of SM were more studied, the mechanisms of its long term toxicity are unclear to now. Stromal cell-derived factor-1 (SDF-1) produced by stromal cell and play important roles at repair and inflammation of different tissues. The aim of this study is the assessment of SDF-1 gen polymorphism in Sardasht chemical victim 25 years after SM exposure in compared to healthy sex-matched controls. **Materials and Methods:** Genomic DNA was extracted by DNAzol from Sardasht chemical victim and health control group peripheral blood. SDF-1 gene was amplified by PCR with specific primers. Polymorphism was evaluated by PCR-RFLP for all PCR products with MSP-I enzyme. Digested products were run in 2% agarose gel and analysis by transilluminator. **Results and Conclusion:** Genotype frequency of SDF-1 gene of 100 SM exposed group were compared with 100 control individuals.

Keywords: SDF-1, Polymorphism, Sulfur Mustard