

عنوان مقاله:

Investigating the Expression Levels of Glutathione Peroxidase and Glutathione Reductase Genes in Mastectomies Women

محل انتشار:

مجله بین المللی تحقیقات پیشرفته زیست شناختی و زیست پزشکی، دوره 11، شماره 3 (سال: 1402)

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خلاصه مقاله:

Introduction: Important genes that may be expressed in women candidates for mastectomy due to breast cancer are important; The expression of these genes in these women can play an important role in the treatment of these patients; The aim of this study was investigating the level of expression of glutathione peroxidase and glutathione reductase genes in mastectomies women. Procedure: After cell culture, the cell suspension was planted in 96-well microplates and treated for 24 hours in a CO₂ incubator at 37°C. In order to synthesize cDNA, extracted RNA molecules were used with the help of Fermentaz Revert Aid TM kit, produced in the United States. Results: The concentration of 500 micrograms of nanoparticles caused the death of more than 60% of MCF 7 cells ($P < 0.001$) while there was no significant difference in all concentrations of nanoparticles on the normal HEK293 cell line. Conclusion: The anti-tumor effects of zinc oxide nanoparticles were shown in increasing the expression of glutathione peroxidase and glutathione reductase genes in MCF-7 breast cancer cell line of mastectomy candidates.

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کلمات کلیدی:

glutathione peroxidase, Glutathione, Mastectomy, Breast cancer, Gene expression

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