Effect Of Botox In Glioblastoma

Samaneh Moniri
Islamic Azad University of Karaj

Background: glioblastoma multiform is malignant tumors of the central nervous system, the most aggressive and Vishay type of brain tumor in adults. Glioblastoma with a high potential for growth, invasion and resistance to treatments such as chemotherapy and radiation therapy have a high potential for public recurrence.

Methods: In this study, the U87-MG glioblastoma cells and doses of Botox 29 unit to 41unit has been used and tested by MTT, and SubG1 and Western blotting were used to examine the cell viability and apoptosis.

Results: The results of the measurement of vital capacity cancer cells treated with Botox, in two different doses of 29 unit and 33unit between 24 and 48 hours, showed that cell death in the treated groups compared to the control group was statistically significant p< 0.05. SubG1 test also showed that 29 unit dose in 24 hours Apoptosis percent more compared to the control groups. Results showed that Western blotting test P53 protein expression significant increase compared to the control groups.

Conclusion: The present data show that Botox could be an anti-cancer effect and apoptosis in glioblastoma cells by increasing the expression of P53 protein and also can be used as treatment in patients after in vivo studies to be used.

Key words: glioblastoma cells, Botox, apoptosis, cell cycle arrest, protein P53