Radiation-induces increased tumor cell aggressiveness of tumors of the glioblastomas?


Abstract
Glioblastoma multiform is the most common and aggressive brain tumor with a worse prognostic. Ionizing radiation is a cornerstone in the treatment of glioblastome with chemo-radiation association being the actual standard. As a paradoxal effect, it has been suggested that radiotherapy could have a deleterious effect on local recurrence of cancer. In vivo studies have studied the effect of radiotherapy on biological modification and pathogenous effect of cancer cells. It seems that ionizing radiations with photon could activate oncogenic pathways in glioblastoma cell lines. We realized a review of the literature of photon-enhanced effect on invasion and migration of glioblastoma cells by radiotherapy.

KEYWORDS: glioblastoma; hadrontherapy; invasion; migration; photons; radiotherapy

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