Oncolytic Viruses

Treatment and implications for patients with gliomas

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BACKGROUND: Oncolytic viral therapies are increasingly being explored for the treatment of diverse cancer types, most notably melanoma. However, advances in the treatment of high-grade gliomas, and specifically glioblastoma multiforme (GBM), are the result of novel oncolytic viral therapies. Delta-24-RGD is one such therapy that has demonstrated promising results in phase 1 trials.

OBJECTIVES: The objective of this article is to provide an overview of Delta-24-RGD, highlighting considerations for nurses in diverse clinical, research, and advanced practice roles.

METHODS: A high-level overview of the pathophysiology of the Delta-24-RGD virus as it relates to GBM is presented. A case study is used to illustrate the course of care for a patient receiving this therapy.

FINDINGS: Delta-24-RGD has demonstrated remarkable clinical efficacy in the near to complete regression of GBM activity. Nurses may increasingly be caring for patients who are undergoing such therapy or have received it in the past. Understanding the mechanism of action, safe-handling implications, and expected patient care needs and treatment sequelae is important.

KEYWORDS: glioblastoma multiforme; gliomas; Delta-24-RGD; oncolytic; melanoma

DIGITAL OBJECT IDENTIFIER 10.1188/17.CJON.S2.60-64