ABSTRACT

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Advantages and drawbacks of dexamethasone in glioblastoma multiforme.

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The most widespread, malignant, and deadliest type of glial tumor is glioblastoma multiforme (GBM). Despite radiation, chemotherapy, and radical surgery, the median survival of afflicted individuals is about 12 months. Unfortunately, existing therapeutic interventions are abysmal. Dexamethasone (Dex), a synthetic glucocorticoid, has been used for many years to treat brain edema and inflammation caused by GBM. Several investigations have recently shown that Dex also exerts antitumoral effects against GBM. On the other hand, more recent disputed findings have questioned the long-held dogma of Dex treatment for GBM. Unfortunately, steroids are associated with various undesirable side effects, including severe immunosuppression and metabolic changes like hyperglycemia, which may impair the survival of GBM patients. Current ideas and concerns about Dex's effects on GBM cerebral edema, cell proliferation, migration, and its clinical outcomes were investigated in this study.

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