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Advances in Treatment of Diffuse Midline Gliomas

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Abstract

Purpose of review: Diffuse midline gliomas (DMGs) generally carry a poor prognosis, occur during childhood, and involve midline structures of the central nervous system, including the thalamus, pons, and spinal cord.

Recent findings: To date, irradiation has been shown to be the only beneficial treatment for DMG. Various genetic modifications have been shown to play a role in the pathogenesis of this disease. Current treatment strategies span targeting epigenetic dysregulation, cell cycle, specific genetic alterations, and the immune microenvironment. Herein, we review the complex features of this disease as it relates to current and past therapeutic approaches.

Keywords: DIPG; Diffuse midline glioma; Pediatric oncology.

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