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Pseudoprogession versus true progression in glioblastoma patients: A multiapproach literature review. Part 2 – Radiological features and metric markers

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Abstract

After chemoradiotherapy for glioblastoma, pseudoprogession can occur and must be distinguished from true progression to correctly manage glioblastoma treatment and follow-up. Conventional treatment response assessment is evaluated via conventional MRI (contrast-enhanced T1-weighted and T2/FLAIR), which is unreliable. The emergence of advanced MRI techniques, MR spectroscopy, and PET tracers has improved pseudoprogession diagnostic accuracy. This review presents a literature review of the different imaging techniques and potential imaging biomarkers to differentiate pseudoprogession from true progression.

Keywords: Diffusion MRI; Glioblastoma; MRS; PET tracers; Perfusion MRI; Progression; Pseudoprogession.

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