ABSTRACT

Pretreatment neutrophil-to-lymphocyte/monocyte-to-lymphocyte ratio as prognostic biomarkers in glioma patients.

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OBJECTIVES: To evaluate the ability for pre-treatment NLR and MLR to predict overall survival (OS) and modified Rankin Scale (mRS) and to explore their relationship with clinicopathological parameters.

METHODS: Retrospective analysis of pretreatment NLR and MLR from 64 glioma patients.

RESULTS: Higher pretreatment NLR (>4.7) predicted higher mean admission mRS ($p < 0.001$) and 6-month mRS ($p = 0.02$). Higher pretreatment MLR (>0.35) was a risk factor for poorer OS in glioma patients ($p = 0.024$). Higher pretreatment NLR was significantly associated with larger tumor diameter ($p = 0.02$).

CONCLUSION: NLR and MLR can serve as prognostic markers to predict functional outcomes and OS in glioma patients.