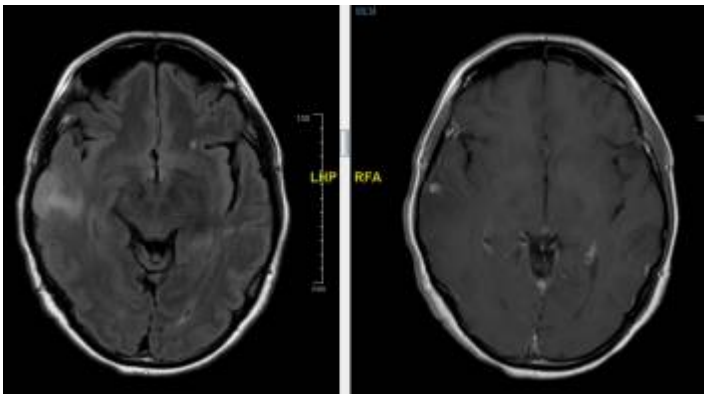
The gold standard for High-Grade Glioma treatment recommends beginning chemoradiation within 6 weeks after. glioblastoma surgery.

The standard of care management for newly diagnosed glioblastoma multiforme (Glioblastoma) includes surgery, radiation, temozolomide (TMZ) chemotherapy, and tumor treating fields [1].

From 2005 chemotherapy with temozolomide, according to Stupp protocol [2] , particularly in patients that demonstrate MGMT promoter methylation.

Conflicting reports have emerged regarding the importance of the time interval between these 2 treatments and there is no clear association between duration from surgery to initiation of chemoradiation on overall survival (OS). [3].



Treatment consists of maximal safe resection, radiotherapy, and chemotherapy. Trials of patients with newly diagnosed grade III glioma have shown survival benefit from adding chemotherapy to radiotherapy compared with initial treatment using radiotherapy alone. Both temozolomide and the combination of procarbazine, lomustine, and vincristine provide survival benefit. In contrast, trials that compare single modality treatment of chemotherapy alone with radiotherapy alone did not observe survival differences. Currently, for patients with grade III gliomas who require postsurgical treatment, the preferred treatment consists of a combination of radiotherapy and chemotherapy [4].

After treatment, all patients have to undergo brain magnetic resonance imaging procedure quarterly or half-yearly for 5 years and then on an annual basis. In patients with recurrent tumor, wherever possible re-resection or re-irradiation or chemotherapy can be considered along with supportive and palliative care. High-grade malignant glioma should be managed in a multidisciplinary center

1)
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2)
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3)
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4)
van den Bent MJ, Smits M, Kros JM, Chang SM. Diffuse Infiltrating Oligodendroglioma and Astrocytoma. J Clin Oncol. 2017 Jul 20;35(21):2394-2401. doi: 10.1200/JCO.2017.72.6737. Epub 2017 Jun 22. Review. PubMed PMID: 28640702.