Glioblastoma Radiotherapy

Historically, the treatment for glioblastoma had consisted of maximal safe resection followed by an adjuvant nitrosourea, with trials by the Brain Tumor Study Group demonstrating evidence for post-op Radiotherapy over best supportive care [1) 2)].

Further analysis of the relationship between survival and radiation dose revealed a dose–effect relationship, with doses of 60 Gy providing superior survival when compared to lower doses [3)].

Glioblastoma Stereotactic Radiosurgery

Glioblastoma Stereotactic Radiosurgery

Glioblastoma Radioresistance

Glioblastoma Radioresistance

1)
Walker MD, Green SB, Byar DP, Alexander E, Jr, Batzdorf U, Brooks WH, et al. Randomized comparisons of radiotherapy and nitrosoureas for the treatment of malignant glioma after surgery. N Engl J Med (1980) 303:1323–9.10.1056/NEJM198012043032303
2)
Walker MD, Alexander E, Jr, Hunt WE, MacCarty CS, Mahaley MS, Jr, Mealey J, Jr, et al. Evaluation of BCNU and/or radiotherapy in the treatment of anaplastic gliomas. A cooperative clinical trial. J Neurosurg (1978) 49:333–43.10.3171/jns.1978.49.3.0333
3)
Walker MD, Strike TA, Sheline GE. An analysis of dose-effect relationship in the radiotherapy of malignant gliomas. Int J Radiat Oncol Biol Phys (1979) 5:1725–31.10.1016/0360-3016(79)90553-4