

## Evidence-Treatment Strategies Of Glioblastoma

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The standard treatment of glioblastoma is maximal safe resection without neurological deterioration followed by chemoradiotherapy with temozolomide.

To improve the extent of tumor resection, awake surgery, intraoperative physiological monitoring, photodynamic diagnosis using 5-aminolevulinic acid and intraoperative MRI are important. Placement of BCNU wafer and photodynamic therapy using talaporfin sodium are also used. However, even if these surgical techniques, the patients who have gross total tumor resection are approximately 50-60%.

One of the biggest reason of the poor prognosis of glioblastoma is that more than half of patients have Karnofsky performance status 70 or less. Other reasons are as follows: More than half of patients are age 60 or more. The tumor grows immediately and invades surrounding brain. Local tumor control is still poor and most of patients have recur about 10 months from the initial treatment. There are many complications associated with glioblastoma. Effective drugs are limited. Approximately 30-40% patients have positive biomarker in good prognosis.

One of the answers to solve these problems as a neurosurgeon is earlier diagnosis and start of the treatment for glioblastoma patients. To improve the prognosis of glioblastoma, the clinical problems evidence-based treatment of glioblastoma are discussed.