Glioma Health-Related Quality of Life

- Occurrence Rates of Delirium in Brain Tumor Patients: A Systematic Review and Meta-Analysis
- Robust molecular subgrouping and reference-free aneuploidy detection in medulloblastoma using low-depth whole genome bisulfite sequencing
- Maximizing Tumor Resection and Managing Cognitive Attentional Outcomes: Measures of Impact of Awake Surgery in Glioma Treatment
- Molecular Correlates of Long-Term Response to Bevacizumab in Glioblastoma
- Individual-level neuroimaging of cognitive control: from basic science to brain tumor clinical applications
- [¹⁸F]FET PET-Guided management of pseudoprogression in glioblastoma (FET POPPING): the study protocol for a diagnostic randomized clinical trial
- Palliative care in patients with glioblastoma: A systematic review
- Predicting attention deficits and functional recovery after glioma resection through functional executive networks: insights from dynamic properties

Gliomas are a type of brain tumor that can significantly impact an individual's health-related quality of life (HRQoL). HRQoL refers to an individual's perception of their physical, psychological, and social well-being about their health status and the effects of any medical interventions or conditions.

The HRQoL of individuals with gliomas can be affected by various factors, including symptoms related to the tumor itself, side effects of treatments such as surgery, chemotherapy, or radiation therapy, as well as emotional and cognitive changes associated with the diagnosis and management of the disease.

This study aimed to assess health-related quality of life (HRQOL) before and after treatment for intracerebral low-grade glioma.

Patients with low-grade glioma who underwent surgical tumor removal between 2012 and 2018 were eligible for this study. All individuals and their closest relatives received thorough preoperative (<seven days before surgery) and posttreatment (12 months after surgery) neuropsychological testing investigating quality of life. The assessment consisted of the Aachen Life Quality Inventory (ALQI) and the Short Form 36 (SF36) questionnaire. Calculated SF36 values were compared with reference values from population-based studies. A set of clinical features were investigated for their association with longitudinal HRQOL deterioration.

A total of 25 patients were referred for further analysis, after adjustment to the 2021 WHO classification for central nervous system tumors. Compared to the values of a healthy reference population, the patients expressed significant limitations in several SF36 items, both before and after treatment. Under treatment, there were no significant changes in the SF36 items, but the ALQI questionnaire indicated decreasing HRQOL over time. Data derived from relatives revealed a high degree of concordance with the rating results of the patients. Univariate analysis identified neurological deterioration and ongoing epileptic seizures as predictors for unfavorable HRQOL after one year.

Low-grade glioma disease has a significant impact on HRQOL and treatment might contribute to further deterioration. New-onset neurological deficits and ongoing epileptic seizures are predictors of limitations in quality of life. Since the results are based on a small cohort with limited follow-up time,

the generalizability of these statements is limited and further studies are required ¹⁾.

Standards

Research studies often use standardized instruments to assess HRQoL in individuals with gliomas. These instruments typically include questionnaires or surveys that measure various domains of HRQoL, such as physical functioning, cognitive functioning, emotional well-being, social functioning, and overall quality of life.

Some commonly used HRQoL instruments in glioma research include:

EORTC QLQ-C30: The European Organisation for Research and Treatment of Cancer Quality of Life Questionnaire-Core 30 is a widely used instrument for assessing HRQoL in cancer patients, including those with gliomas. It measures various aspects of functioning and symptoms, such as physical functioning, emotional functioning, pain, and fatigue.

EORTC QLQ-BN20: This supplemental module to the QLQ-C30 specifically assesses HRQoL issues relevant to individuals with brain tumors, including cognitive functioning, communication deficits, and future uncertainty.

FACT-Br: The Functional Assessment of Cancer Therapy-Brain is another questionnaire designed to assess HRQoL in individuals with brain tumors, including gliomas. It measures various domains such as physical well-being, social/family well-being, emotional well-being, functional well-being, and additional concerns specific to brain tumors.

FACT-Cog: This instrument assesses cognitive functioning and its impact on HRQoL in cancer patients, including those with brain tumors.

These instruments help clinicians and researchers better understand the impact of gliomas and their treatments on patients' quality of life. By identifying areas of concern, healthcare providers can develop targeted interventions to improve HRQoL and support individuals throughout their glioma journey.

Health-related quality of life (HRQOL) measures have become increasingly important in the management of glioma patients in both research and clinical practice settings. Functional impairment is common in low-grade and high-grade glioma patients as the disease has both oncological and neurological manifestations. Natural disease history as well as medical or surgical treatment can negatively influence HRQOL. There are no universal standards for HRQOL assessment in glioma patients. In this study, we examine patient perspectives on functional outcome domains and report the prevalence of impairment rates using the National Institutes of Health (NIH) Patient Reported Outcomes Measurement Information System (PROMIS) and Neuro-QOL item banks as measures of HRQOL. Retrospective analysis of a prospectively collected dataset involving 79 glioma patients reveals that quality of life concerns are the most important consideration behind making decisions about treatment in 80.7% of patients. The prevalence of functional impairment by PROMIS and NEURO-QOL assessment is high, ranging from 28.6% in the physical function domain to 43.9% in the cognitive function domain. Pain and anxiety related to physical decline is higher in LGG patients compared to HGG patients. Aphasia severity also impacts HRQOL. The results of this study suggest

1)

2025/06/27 08:34

Rauschenbach L, Bartsch P, Santos AN, Michel A, Gull HH, Ketelauri P, Darkwah Oppong M, Schmidt B, Dobersalske C, Blau T, Ahmadipour Y, Jabbarli R, Wrede KH, Sure U, Dammann P. Longitudinal impact of intracerebral low-grade glioma disease on health-related quality of life. J Neurosurg Sci. 2024 Mar 14. doi: 10.23736/S0390-5616.23.06107-6. Epub ahead of print. PMID: 38483435.

Gabel N, Altshuler DB, Brezzell A, Briceño EM, Boileau NR, Miklja Z, Kluin K, Ferguson T, McMurray K, Wang L, Smith SR, Carlozzi NE, Hervey-Jumper SL. Health Related Quality of Life in Adult Low and High-Grade Glioma Patients Using the National Institutes of Health Patient Reported Outcomes Measurement Information System (PROMIS) and Neuro-QOL Assessments. Front Neurol. 2019 Mar 15;10:212. doi: 10.3389/fneur.2019.00212. PMID: 30930834; PMCID: PMC6428723.

From: https://neurosurgerywiki.com/wiki/ - **Neurosurgery Wiki**

Permanent link: https://neurosurgerywiki.com/wiki/doku.php?id=glioma_health-related_quality_of_life



Last update: 2024/06/07 02:51