



ASSESSING FUNCTIONAL OUTCOMES IN GLIOMAS

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Resumen

The aim of surgery for gliomas is to maximise the extent of resection but minimise the risk of neurological deficits. Several tools now exist to help with this that have help reduce morbidity of surgery. As a group, we are good at assessing motor and language dysfunction, but are poor at identifying other deficits. These deficits can be considered as composing of a number of levels of deficit. The impairment of body function is what we identify through neurological examination. This will lead to a limitation of activity where the patient finds certain tasks difficult to execute. This will impact patient quality of life. We currently have no knowledge of the impact of surgery on quality life despite this is the key outcome for patients. Recent studies suggest we over-estimate patients' functioning and suggest the need for objective methods of assessment. We have been collecting two measures of patient functioning pre- and post-operatively.

1. Patient reported quality of life measures - this collects data from the EORTC-QLQ30 with BN20 brain specific questionnaires on a tablet computer that prevents incomplete data recording. This has allowed us to explore patient concerns and have shown marked discordance between patient-reported and surgeon-recorded concerns. We have also shown the impact of new visual field deficits in immediate patient functioning. Longer term follow up studies are required to assess changes over time.
2. Neuropsychological functioning - this was assessed using the OCS-Bridge app that tests multiple functions. This is quicker and more acceptable to patients than traditional testing. It allows us to track changes post operatively.

Our ultimate aim is to correlate this data with imaging of brain function and connections (using DTI and resting state fMRI) to understand which regions of the brain that surgery may cause deterioration in patient functioning.