

Return to work following diagnosis of low-grade glioma

A nationwide matched cohort study

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Study objective

This study examined patterns of sick leave and predictors of return to work (RTW) in patients with low-grade glioma (LGG).

What is known and what this paper adds

Patterns and factors associated with RTW after treatment for LGG has only been examined in smaller studies at fixed time-points. This study found that half of patients RTW within the first year after treatments, describes the time pattern of RTW and describes risk factors for lack of RTW in patients with LGG.

Participants and setting

The Swedish Brain Tumor Registry provided data on 381 adults (ages of 18–60 years) diagnosed with histopathologically verified supratentorial hemispheric LGG (grade II on the World Health Organization [WHO] scale) in Sweden between 2005 and 2015. For each patient, the investigators used data from Statistics Sweden to identify ≤ 5 control individuals (total controls, 1,900) matched to the patient by birth year, sex, residential municipality, and education level.

Design, size, and duration

The Swedish Social Insurance Agency provided data on employment, sick leave, and disability compensation. The National Patient Registry provided data on clinic visits and comorbidities, and the National Prescription Registry provided prescriptions data. A patient's surgery date served as an index date for the patient and the patients' matched controls. The investigators used multivariable logistic regression analyses to identify the predictors of no RTW after surgery.

Primary outcome measures

The primary outcomes were the predictors of no RTW 1 year after surgery.

Table Predictors of no RTW 1 year after surgery

Predictor	Odds ratio (95% confidence interval) for no RTW at 1 y	p Value
Age (per y)	0.96 (0.94–0.99)	0.005
Preoperative sick leave (per 10 d)	0.92 (0.88–0.96)	<0.001
Functional level (per WHO status category)	0.64 (0.45–0.91)	0.01

Main results and the role of chance

A year before the index dates, 88% of patients and 91% of controls were working. The proportion of controls working changed little over time, but the 1- and 2-year postoperative percentages for patients were 52% and 63%, respectively. The predictors of no RTW 1 year after surgery were previous sick leave utilization, older ages, and worse WHO functional statuses.

Bias, confounding, and other reasons for caution

Some patients might have been on postoperative sick leave for reasons unrelated to LGG.

Generalizability to other populations

The present study's reliance on data from Sweden may limit generalizability to dissimilar countries.

Study funding/potential competing interests

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A draft of the short-form article was written by M. Dalefield, a writer with Editage, a division of Cactus Communications. The corresponding author(s) of the full-length article and the journal editors edited and approved the final version.

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