Are Focal Symptoms an Indicator for Poorer Prognosis in Grade 2 Oligodendrogliomas?



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Introduction

Low grade oligodendrogliomas frequently present with seizures in relatively younger populations. We review data spanning over 20 years on Grade 2 Oligodendrogliomas from Henry Ford Hospital trying to identify whether focal symptoms at time of diagnosis are an indicator for poorer prognosis.

Methods

A retrospective chart review of grade 2 oligodendrogliomas was conducted from the Hermelin Tumor Bank. Variables reviewed included gender, age, clinical presentation, disease progression, 1p/19q status, MIB-1%, and mortality. Focal symptoms, such as seizures, were then used as a variable in multivariate survival analysis together with established prognostic factors. Tumor progression was defined as a change in radiographic characteristics with or without clinical worsening.

Results

234 patients were identified who met inclusion criteria. The initial presenting symptom was seizure in 192 (82.05%), word finding difficulties in 5 (2.14%), other focal symptoms in 6 (2.56%), headaches in 21 (8.97%), and incidental in 10 (4.27%) patients. Mean age in focal patients was 43.19 years, and 41.87 years in non-focal patients (p=0.7).

138 patients displayed tumor progression (55.5%) and mean time to progression was 1775 days. 103 focal patients progressed after a mean of 1846 days; whereas 35 non-focal patients progressed with a mean of 1384 days (p=0.076). 10 of 31 non-focal patients were reported dead (32.26%), and 46 of 203 focal patients were reported dead (22.66%). 9 of 21 (42.86%) patients presenting with headache, died. Interestingly, no patient with an incidental tumor was reported dead.

Conclusions

We found that patients presenting with non-focal symptoms leaned toward an earlier time to progression of disease (without significance) and patients presenting with focal symptoms had an overall increased survival rate (23% focal, 33% non-focal). No patient whose tumor was found incidentally died.

Learning Objectives

Prognosis of grade 2 oligodendrogliomas