

Trends Of Diffused Glioma In Southern Thailand: The First Population-Based Study

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Purpose

To evaluate the incidence and trends of diffused glioma in Songkhla population from 1989 through 2030.

Materials and Methods

Diffused glioma cases were extracted from the Songkhla cancer registry, from 1989 through 2014. Joinpoint and age-period-cohort (APC) methods were used. The incidence projection for the future time periods was based on the appropriate model to predict change by glioblastoma multiforme (GBM) and other grades of diffused glioma (non-GBM) conforming to WHO grade.

Results

We identified 271 cases diagnosed with diffused glioma (105 WHO gr II, 28 gr III and 138 gr IV (GBM)). The majority of cases were male (151, 55.7%) and the median age at diagnosis was 40 years (range 0-84). The age-specific rate (ASR) for both males and females were higher in elderly patients older than 55. Overall ASR's were equal in GBM and non-GBM group throughout this period, 0.37 and 0.38 per 100,000-person year, respectively. We found an increasing trend only in GBM group that associated with the period of improvement in diagnostic modalities such as advanced neuroimaging.

Conclusion

This is the early study on the population-based incidence trends of diffused glioma in Thailand. The increasing trend in GBM group advocated to ameliorate appropriated diagnostic tool and treatment facilities.