ABSTRACT

The Epidemiology of Brain and Spinal Cord Tumors.

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CNS tumors are a diverse group of neoplasms that emerge from a variety of different CNS cell types. These tumors may be benign, malignant, or borderline in nature. The majority of high grade glial tumors are fatal, with the exception of pilocytic astrocytoma. Primary malignant CNS tumors occur at a global annual rate of 2.1 to 5.8 per 100,000 persons. Males are more likely to develop malignant brain tumors than females, whereas benign meningiomas are more common in adult females. Additionally, gender inequalities in non-malignant tumors peak between the ages of 25 and 29 years. Only a small number of genetic variants have been associated with survival and prognosis. Notably, central nervous system (CNS) tumors exhibit significant age, gender, and race variation. Race is another factor that affects the incidence of brain and spinal cord tumors. Different races exhibit variation in terms of the prevalence of brain and CNS malignancies. This chapter discusses ongoing research on brain and spinal cord tumor epidemiology, as well as the associated risks and accompanied disorders.