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EPID-01. ESTIMATING THE BURDEN DUE TO BRAIN AND OTHER CNS TUMORS IN ADOLESCENTS IN THE UNITED STATES
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BACKGROUND: Brain and other central nervous system (CNS) tumors in adolescents have unique biological and behavioral distinctions from both children and adults. As a result, they pose challenges to treatment and reporting. Here, we describe the epidemiology of brain and other CNS tumors in adolescents (ages 15-19 years) in the United States, including mortality, survival, and prevalence. METHODS: The Central Brain Tumor Registry of the United States (CBTRUS) data (containing data from the CDC’s National Program of Cancer Registries (NPCR) and NCI’s Surveillance, Epidemiology and End Results (SEER) data) were used to calculate average annual age-specific incidence rates (AASIR) per 100,000 population overall and by sex and race/ethnicity. Average annual age-specific mortality rates (AASMR) per 100,000 population for deaths resulting from all primary malignant brain and other CNS tumors were calculated using mortality data from NCHS, NPCR survival data were used to calculate relative survival (RS). Estimated prevalence counts as of December 31, 2024 were estimated using incidence from CBTRUS and SEER, and survival from SEER. RESULTS: AASIR for all brain and other CNS tumors among adolescents was 7.51/100,000. Tumors of the sellar region had the highest incidence (AASIR=2.74/100,000). Overall, incidence was higher for females and non-Hispanic White persons. Overall AASMR was 0.56/100,000. Total five-year RS was 92.0%. Tumors of the pituitary had the highest RS (five-years=99.9%) and glioblastoma had the lowest (five-years=16.4%). As expected, prevalence was highest for tumors of the sellar region (3,720 cases). CONCLUSION: Incidence, prevalence, and survival patterns for brain and other CNS tumors vary between adolescents, adults, and children. An accurate statistical assessment of these tumors in adolescents is required to understand risk and impact on this unique population, and to serve as a reference for affected individuals, for researchers investigating new therapies, and for the clinicians who treat them.