ED-07. TRENDS IN CENTRAL NERVOUS SYSTEM TUMOR INCIDENCE RELATIVE TO OTHER COMMON CANCERS IN ADULTS, ADOLESCENTS, AND CHILDREN IN THE UNITED STATES, 2000-2010
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SIGNIFICANCE: Time trends in cancer incidence rates (IR) measure the changing burden of cancer on a population over time. Overall IR of cancer in the US is declining, but trends in common cancers may obscure trends in rare cancers that contribute disproportionately to mortality and morbidity. We examined incidence time trends of the most common cancers in children, adolescents, and adults between 2000 and 2010 as compared to central nervous system tumors (CNST). METHODS: Data from the United States Cancer Statistics and the Central Brain Tumor Registry of the United States were used to analyze incidence trends by selected histologies and age. Age-adjusted IR per 100,000 population with 95% confidence intervals (95% CI) and Annual Percent Change (APC) with 95% CIs were calculated for CNST and selected common cancers overall, by age, gender, race/ethnicity, selected CNST histologies, and CNST malignancy status. RESULTS: In adults, there were significant decreases in malignant CNST (2008-2010: APC = -3.1), colon (2000-2010: APC = -3.1), breast (2000-2010: APC = -0.8), lung (2000-2010: APC = -1.1), and prostate cancer (2000-2010: APC = -2.4), but a significant increase in non-malignant CNST (2004-2010: APC = 2.7). In adolescents, there were significant increases in malignant CNST (2000-2008: APC = 1.0) and non-malignant CNST (2004-2010: APC = 3.9). In children, there were significant increases in malignant CNST (2000-2010: APC = 0.6), acute lymphocytic leukemia (2000-2010: APC = 1.0), and non-Hodgkin lymphoma (2000-2010: APC = 0.6). CONCLUSIONS: Between 2000 and 2010, there were significant decreases in malignant CNST and other common cancers in adults, significant increases in malignant CNST in adolescents, significant increases in malignant CNST and other common cancers in children, and significant increases in non-malignant CNST in adults and adolescents. Surveillance of IR trends is an important way to measure the changing public health and economic burden of cancer; histology-specific analyses are essential to measure the potential disproportionate impact of rare cancers.