Health status, medical care, preventive screening, and risk behaviors in adult survivors of cancer diagnosed during adolescence: A report from the Childhood Cancer Survivor Study (CCSS).

Short Title: Cancer in adolescence follow-up

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Background: Adolescence (AD) and pre-adolescence (PRE-AD) are critical physical and psychological developmental periods. The purpose of this study was to determine if the health status, health care utilization, or risk behaviors were different in survivors diagnosed in their AD and PRE-AD years in comparison with those diagnosed in their childhood years.

Methods: The CCSS is a 26 institution cohort study of 5 year survivors of pediatric cancer diagnosed 1970-1986. Self-reported data were analyzed in 9535 adult survivors (>18 years of age) grouped into three categories based on age at cancer diagnosis: 0-9 years old (CH, N=4768), 10-12 years old (PRE-AD, N=1438), and 13-20 years old (AD, N=3329). Logistic regression was sued to estimate odds ratio and 95% confidence levels for outcomes in survivors diagnosed in PRE-AD and AD in comparison to the CH group.

Results: CH, PRE-AD, and AD had similar health status outcomes and cancer-related health care. AD females were more likely to report a pap smear or a clinical breast exam than CH females. PRE-AD females were more likely to be current smokers, physically inactive, or binge drink in comparison with CH females. PRE-AD males were more likely to binge drink in comparison with CH males. In contrast, AD males who were 26 years or older at the time of interview were less likely to binge drink in comparison with CH males of the same age at interview strata.

Conclusion: The diagnosis of cancer during the teens does not produce more adverse general or mental health outcomes than diagnosis as a younger child. Survivors of adolescent cancer seek caner-related visits, general medical care and perform health screenings equally or better than do survivors who are younger at diagnosis. Survivors diagnosed during pre-adolescence report an excess of risk behaviors as young adults and could benefit from targeted interventions.

Keywords: Survivorship; pediatric cancer; adolescence