LATE CARDIAC ABNORMALITIES AFTER ANTHRACYCLINE THERAPY IN ASYMPTOMATIC ADULT SURVIVORS OF CHILDHOOD CANCER: LONG-TERM FOLLOW-UP STUDY FROM THE MEMORIAL SLOAN-KETTERING CANCER CENTER

ACC Poster Contributions
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Background: Late cardiotoxicity after anthracycline therapy has been well documented in the pediatric cancer population. However, the spectrum and prevalence of cardiac abnormalities in asymptomatic adult survivors of childhood cancer is less well defined.

Methods: 114 consecutive adult survivors (age >18) of childhood and young adult cancer with past anthracycline exposure seen at the Adult Survivorship Program from 7/09-8/10 were included. Clinical information and echocardiographic data were analyzed. The patients were divided into 3 groups based on cumulative anthracycline dose.

Results: The age of the cohort ranged from 19 to 57 years and nearly half were men. Follow-up time since treatment varied from 3 to 45 years. Fractional shortening (FS), LV cavity size and LV mass were lower in patients treated with anthracycline than in an age-matched control group. Twenty percent of the cohort demonstrated reduced FS of <30% which was directly related to the cumulative anthracycline dose but showed no change in relation to time since treatment. LV mass and wall thickness were similar between the 3 groups but showed no correlation to age or body mass index.

Conclusions: There is a high prevalence of cardiac abnormalities in asymptomatic adult survivors of childhood cancer. LV systolic dysfunction was common and the expected response of LV mass to physiologic changes was not observed. Longitudinal studies are needed to define the clinical significance of these findings.