ABSTRACT# 27

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Title: Newly identified chemotherapy-induced peripheral neuropathy in a childhood cancer survivorship clinic
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Background: Chemotherapy-induced peripheral neuropathy (CIPN) is a debilitating side effect of chemotherapy amenable to early intervention. Identification requires a focused examination that may not be part of routine oncology care. We aimed to estimate the prevalence of newly identified versus previously known CIPN in a specialty survivorship clinic.

Methods: This cross-sectional analysis included childhood cancer survivors diagnosed at <18 years of age who attended their first in-person survivorship visit at the HEROS childhood cancer survivorship clinic at Yale between January 1, 2018 and December 31, 2020. CIPN was identified by clinical interview and/or physical examination by a medical provider trained in survivorship. Previously known CIPN was determined through medical record abstraction. Associations of demographic and treatment characteristics with newly identified (versus previously known) CIPN were estimated using Fisher’s exact test.

Results: Among 110 childhood cancer survivors (47% male, average age 16.5 years [SD=6.8], average time since diagnosis 6.8 years [SD=5.2]), CIPN was more frequently identified at first survivorship visits than in prior oncology visits (47% vs. 10%, p=0.003). Of the 52 survivors with CIPN, 42 (81%) were newly identified at survivorship clinic and 11 of these survivors (26%) had significant impairment that required referral for further management (Figure). There was no association of known CIPN with treatment exposures, cancer diagnosis, sex, current age, or age at diagnosis in comparison to newly identified CIPN.

Conclusions: CIPN is prevalent among childhood cancer survivors and is often not identified until evaluation in survivorship clinic. We did not find any patient or disease characteristics associated with identification of CIPN prior to survivorship clinic. Interventions aimed at early recognition of CIPN in childhood cancer survivors are warranted so that survivors can benefit from available treatments when CIPN develops.

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(data provided below)
Figure: Previously known and newly identified CIPN among survivors in the HEROS clinic from 2018-2020