

Canadian Pain Society Annual Scientific Meeting
Research Poster Abstract

Title: Chronic Pain and Pain Interference in Adult Survivors of Childhood Cancer

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Background/Aims: Chronic pain and pain interference are common among adult survivors of childhood cancer and both are modifiable. Little is known about associated risk factors.

Methods: Adult survivors of childhood cancer (N=233, mean age=40.8 years, SD=9.0, 50.6% female, 32.5 years since diagnosis) from the Childhood Cancer Survivor Study completed chronic pain (pain lasting ≥ 3 months), pain interference (7-item mean score), and psychosocial measures. Treatment, disease, and demographic variables were abstracted from medical records. Multivariable logistic and linear regression models estimated odds ratios (OR) and mean effects (B) with 95% confidence intervals (CI) for associations of key risk factors with chronic pain and pain interference.

Results: 41.2% [95% CI:36.5%-49.8%] of survivors reported chronic pain, of whom 24% reported severe pain interference. Chronic pain was associated with intravenous methotrexate (OR [95% CI]; 2.67 [1.13-6.61]), respiratory (5.55 [1.99-18.12]), gastrointestinal (3.68 [1.46-10.00]), musculoskeletal (3.38 [1.25-9.81]) and neurological (2.69 [1.20-6.20]) conditions, as well as clinically significant depression with anxiety (18.28 [4.43-126.02]) or either depression or anxiety (2.89 [1.37-6.19]), and unemployment (2.01 [1.03-3.94]). Higher pain interference was associated with cardiovascular conditions (B [95% CI]; 9.72 [3.01-16.43]), neurological conditions (11.06 [3.36-18.76]), clinically significant levels of depression with anxiety (23.44 [14.75-32.31]), either depression or anxiety (9.70 [2.76-16.64]), and unemployment (12.04 [5.06-19.01]).

Discussion/Conclusions: Decades following treatment, a substantial proportion of survivors of childhood cancer report chronic pain. Treatment exposures, emotional distress, and chronic conditions were associated with increased chronic pain and pain interference. The current findings suggest emotional and physical health may be targets for pain management strategies.