Since January 2020 Elsevier has created a COVID-19 resource centre with free information in English and Mandarin on the novel coronavirus COVID-19. The COVID-19 resource centre is hosted on Elsevier Connect, the company's public news and information website.

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Postural Orthostatic Tachycardia Syndrome (POTS): Characteristics of Youth Enrolled in an Outpatient Interdisciplinary Pediatric Chronic Pain Program

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Postural Orthostatic Tachycardia Syndrome (POTS) is a common form of orthostatic intolerance that affects about 3,000,000 people in the United States. For youth, significant functional impairment is noted, especially related to school attendance, limited participation in social and physical activities, and lower quality of life. Although previous research highlights the unique challenges for youth with chronic pain, fewer studies have focused on the clinical presentation of pediatric patients with POTS. This study aimed to explore characteristics of youth with POTS presenting to an interdisciplinary pediatric chronic pain program. Twenty-nine adolescents (14.7 +/- 1.7 years; 79% female) diagnosed with POTS presenting with their caregiver to an initial visit at an interdisciplinary pediatric chronic pain management program at a large Northeastern children's hospital in the United States were asked to complete questionnaires assessing demographic and pain characteristics, pain acceptance, and functional impairment and anxiety (PROMIS; t-scores). Number of visits within the program were gathered from medical record. Youth were primarily Caucasian/White (86.2%), Other (6.9%), AAPI (3.4%) and Mixed Race (3.4%). Youth reported overall low pain acceptance (M=34.1, SD=9.3), moderate anxiety (M=57.1, SD=13.1) and high pain interference (M=63, SD =7.4). Caregivers reported observing moderate anxiety (M=59.1, SD =11.5) and high pain interference (M=65.1, SD=4.6) for youth. Adolescents were observed to attend a wide range of visits within the program, including medical (1.7 +/- 2.5), physical therapy (3.4 +/- 4.9), occupational therapy (.5 +/- 1.7), and psychology (4.3 +/- 3.6). Less is known about youth with POTS who present for treatment. Additionally, youth with POTS meet with multiple doctors before receiving a diagnosis leading to disparities in access to treatment and the type of treatment that is received. Data here highlights that youth with POTS are experiencing significant impairment and more research targeting this population is necessary to improve outcomes.

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Application of painDETECT in Pediatric Chronic Pain: How Well Does It Identify Neuropathic Pain and Its Characteristics?

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Pediatric neuropathic pain is difficult to diagnose, and when undetected is associated with functional disability, mental health concerns, and decreased quality of life. PainDETECT is a screening tool developed to differentiate neuropathic from nociceptive pain components, thus guiding treatment decision-making and improving outcomes. Therefore, the purpose of this study was to evaluate how well painDETECT can identify neuropathic pain and its characteristics in a pediatric population. Adolescents (10-24yo) were recruited from two major children's hospitals. Participants completed painDETECT and two quantitative sensory tasks (QST) that assess mechanical allodynia (brush) and pressure pain (algometer) as part of an ongoing study. Pain diagnoses were collected via parent report and participant medical chart, when unclear. Descriptive statistics and ANOVAs were used to characterize participants and assess painDETECT in relation to diagnosis and QST measures. Participants with chronic pain diagnoses (N=110, Mage=15.05$\pm$2.4, Nfemale=88) and peers without pain (N=55, Mage=15.84$\pm$3.9, Nfemale=39) were included. As expected, painDETECT scores for participants with pain (M=11.51$\pm$6.59) were higher than peers without pain (M=1.42$\pm$2.15). Among those diagnosed with neuropathic pain, painDETECT identified 88.5% as having neuropathic pain. Among those diagnosed with abdominal, endometriosis, and fibromyalgia, 75% were identified as having nociceptive pain and 0% as having neuropathic pain. For those diagnosed with musculoskeletal and pain amplification, 61% were identified as having nociceptive pain and 19.6% as having neuropathic pain. Individuals in the neuropathic pain category had significantly higher mechanical allodynia (p=.021) and lower pressure pain thresholds (p=.059). PainDETECT differentiated participants with pain from their peers without pain and demonstrated accuracy in identifying participants as having nociceptive vs. neuropathic pain, consistent with their existing pain diagnosis. Moreover, QST results were consistent with a positive neuropathic screening. Taken together, results support the use of painDETECT as a pediatric neuropathic pain screening tool. Grant support from 5R01HD83270.

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Prevalence of Chronic Pain among School-aged Children in the United States During the First Year of the COVID-19 Pandemic: A Nationally Representative Study

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The COVID-19 pandemic and its associated disruptions have been shown to increase rates of childhood depression, anxiety, obesity, and insomnia. Thus far, the epidemiological impact of the pandemic on the national prevalence of pediatric chronic in the United States has not been systematically addressed. We aimed to compare the national prevalence of pediatric chronic pain between 2019 (pre-pandemic) and 2020 (first year of the pandemic) and determine whether changes varied across sociodemographic groups. Cross-sectional analysis of children (6-17 years) participating in the National Survey of Children's Health (NSCH) 2019 and 2020 (n=48,319). Chronic pain was defined as the caregiver reporting their children had "frequent or chronic difficulty with repeated or chronic physical pain during the past 12 months". We computed adjusted prevalence ratios (aPR) and 95% confidence intervals (CI) comparing the prevalence of chronic pain between survey years using survey-weighted Poisson regression adjusted for age, sex, race/ethnicity, parental education, and Census region. In separate Poisson models with interactions between sociodemographic variables and survey year, we tested for multiplicative effect measure modification using joint Wald tests for all interaction terms. The estimated national prevalence (95% CI) of chronic pain in children 6-17 years was 10.6% (9.7, 11.6%) in 2019, decreasing to 7.3% (6.7, 8.0%) in 2020. The adjusted prevalence of chronic pain was estimated to be 31% lower in 2020 than in 2019 (aPR=0.69, 95% CI: 0.61, 0.79; p<0.001). We found no differences in the change in chronic pain prevalence by age (p=0.68), sex (p=0.65), race/ethnicity (p=0.55), parental education (p=0.76), and Census region (p=0.28). Contrary to our expectations, the national prevalence of pediatric chronic pain decreased during the first year of the COVID-19 pandemic relative to the same period one year earlier. Additional studies are needed to investigate longitudinal patterns and mechanisms explaining reduced pain burden.

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Did the Covid-19 Pandemic Have an Impact on Depressive Symptoms in Adolescents with Juvenile Fibromyalgia?

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The Covid-19 pandemic caused significant disruptions to adolescents' daily lives resulting in harmful mental health outcomes. The impact of the pandemic on adolescents with chronic pain is unknown. The objective of this study was to leverage data being collected as part of an ongoing multi-center trial for the treatment of Juvenile fibromyalgia (JFM) - the FIT Teens trial, to examine the impact of the pandemic on depressive symptoms in adolescents with JFM. Adolescents with JFM who were enrolled from January 2018-November 2021 (N=270, 85.6% female, Mage=15.21, SD=1.61) completed the Children's Depression Inventory-II (CDI-II) and Visual Analog Pain Scale (0-10 cm) as part of their baseline assessments. Independent samples t-test and chi-square tests were conducted to compare total CDI-II scores, pain ratings, and endorsement of suicidal ideation pre-pandemic, versus after the onset of the pandemic (i.e., after March 2020). CDI-II raw scores for adolescents with JFM who completed their baseline assessment pre-pandemic were significantly higher (M=19.80; n=160) than those who completed their baseline assessment following the onset of the pandemic (M=17.20; n=106; t=2.63, p=.01). There were no differences in pain ratings (MPre=5.81; MPost=5.66; t=.90, p=.34) or