



Improving Pain Management:

Treatment, Coordination with Pain Clinic, and
Strategies to Support School Success

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Disclosures

- Nothing to Disclose.



OBJECTIVES

- ✓ Recognize the **prevalence of chronic pain in children**
- ✓ **Characterize the differences between acute and chronic pain**
- ✓ Describe the **multidisciplinary nature of treatments for chronic pain** at the CNMC Pediatric Chronic Pain Clinic
- ✓ Review the **cycle of school anxiety** in pediatric chronic pain
- ✓ Discuss **best practices for treatment of school anxiety**
- ✓ Identify **when to refer and how to refer to the CNMC Pediatric Chronic Pain Clinic**



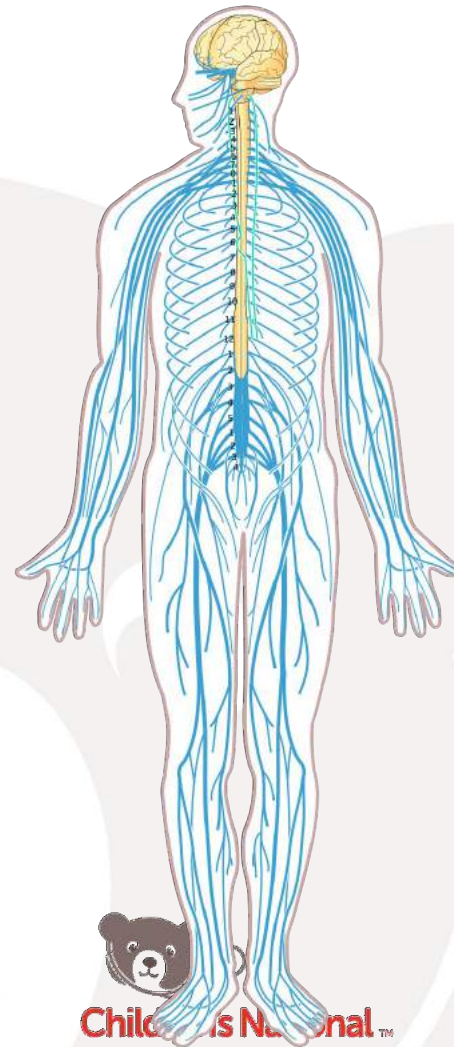
Pediatric Chronic Pain

- Prevalence
 - 5-38% of children and adolescents live with chronic pain
- Cost
 - 19.5 billion dollars annually in the US



More than obesity and asthma combined

- Direct medical cost
- Productivity loss
- Direct nonmedical cost



What is chronic pain?

	Acute Pain	Chronic Pain
Purpose:	Protective	Not protective
Cause:	Related to an anatomical injury	Neuronal processing problem
Duration:	Self limited: resolves with tissue healing	Persistent: continues beyond the time frame expected for tissue healing
Treatment:	Responds to one type of therapy (medications)	Requires multiple modes of therapy (medications, physical therapy, psychological therapy)



Chronic Pain Treatment Best Practices

Multidisciplinary treatment is essential when *pain is chronic* and patient is showing *functional impairment*

- **Medications**
 - Neuropathic agents, NSAIDS, Muscle relaxants, Topicals
- **Interventional treatments**
 - Headaches (Botox, Greater occipital nerve blocks)
 - Abdominal pain/ Abdominal cutaneous nerve entrapment syndrome
 - Back pain (Epidural steroid injections, Piriformis Injection, Sacroiliac joint injection)
 - Muscle pain (Trigger point injections)

Chronic Pain Treatment Best Practices

- **Physical Medicine**
 - Bracing, Taping, Botox for spasticity
- **Physical Therapy**
- **Acupuncture**
 - Patients with Fibromyalgia, Anxiety, Chronic fatigue, Headache, Abdominal pain
- **Pain Psychology**
 - Cognitive behavioral therapy
 - Biofeedback/Relaxation training
 - Sleep improvement
 - *School reintegration*

Chronic Pain, Anxiety, & School

- Adolescents with chronic pain are at increased risk of anxiety (Noel et al., 2016)
- School Anxiety and avoidance often develop
 - 1/3 experience anxiety-related school avoidance (Mano, 2017)
 - Higher rates of school absences (Mano, 2017)
- Pediatrician's Role



Rehabilitation Approach

- **Goal is to focus on INCREASING FUNCTIONING**
 - Pain reduces only after functioning increases
- Increase activity level
 - Daily schedule/routine
 - Gradually increase exercise
 - Focus on reconditioning
 - May require PT
 - ***Attend school daily***



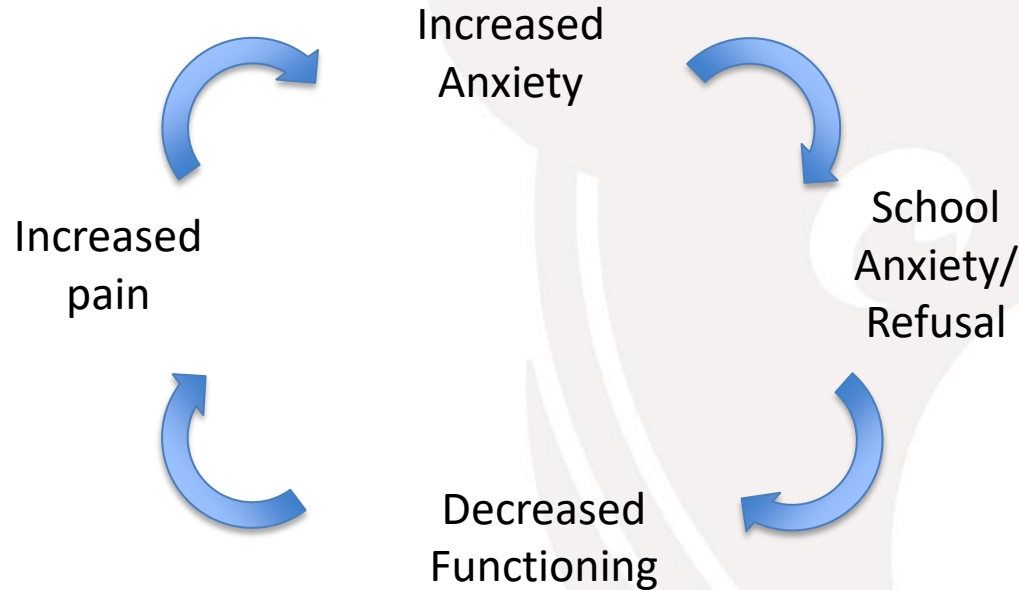
School Stress Morphs into School Anxiety

- It hurts too much for school!
 - Stay home to rest/cope
 - Difficult to focus/concentrate
- Missed work piles up
 - Return to school is harder
- School Anxiety develops



Pain and School Anxiety

- Cycle:
 - Missing School to Avoid Pain →



Missing School

- Pain is NOT a reason to miss school
- Dizziness is NOT reason to miss school
- Reasons to miss school – Acute emergency:
 - Contagious (school rules)
 - Fever over 102.8
 - Profuse Bleeding
 - Protruding limb
 - Coma
 - Danger to self or others (SI)
 - Rest and/or recovery are a necessary part of the therapy
- ?? Does patient need to go to ER?
- Other reasons: death of a family member or friend



Best Practices to Treat School Anxiety/Refusal

- Exposure
- Gradually increase school attendance
 - Decrease Anxiety
 - Decrease Depression
 - Decrease stress
 - Attend school daily

Role of Psychologist

- **Create tailored plan** to support return to school
- **Collaborate** with school and provide education
- **Problem-solve** barriers to progress
- **Cognitive Behavioral Therapy** for Anxiety and Pain:
 - **Psychoeducation** of anxiety with patient and parent
 - **Exposure therapy** using fear hierarchy
 - **Coping techniques**
 - Relaxation & distraction techniques
 - Cognitive restructuring
 - **Increase motivation**
 - **Parent training**



School Recommendations: Difficult Attendance

- Pain psychologist works with schools, patients, and families
 - Create tailored return to school plans
- Some examples may include:
 - Modified schedule (start late, end early)
 - Reduced workload
 - Extra time for assignments / tests
 - Note taker
- **AVOID HOMEBOUND**
 - If needed, only agree to partial home schooling & gradually increase school time.



School Recommendations: 504 Plan

- Flash Pass
- Access to hydration & snacks
- Stop the Clock (allow breaks)
- More travel time between classes
- Reduce class load
 - Drop classes
 - Reduce intensity of courses (e.g., AP to honors)
- Reduce Make-up Work load / flexible deadlines
 - ONLY while catching up on missed work/after missing several consecutive days/weeks (limited time)



Note: 504 Plan can be beneficial; can also be counter-productive

Optimizing Co-Management

- **Pediatrician's Role**
 - Identify signs early
 - Refer to specialist
- **Benefits of pain psychologist coordinating care**
 - Educating schools, providing consistent therapy
- **When to refer to psychologist**
 - Worsening patient functioning
 - High anxiety
 - Decreasing time at school/requesting school forms


Referrals to Behavioral Medicine

- **Framing it is Key**
 - Focused on teaching skills/strategies that can reduce the symptoms
 - Skills are relevant to help everyone deal with stress and anxiety/frustration that are inevitable
 - *Referral to psychology does not mean* that the pain is in their head
- **Tips for referring patients to a psychologist for CBT**
 - Contact insurance company for list of psychologists (with training in Behavioral Medicine / pediatric psychology)
 - “Cognitive Behavioral Therapy”
 - Psychologist For patients with severe functional disability or complexity, refer to Children’s National for interdisciplinary team evaluation

Referral to Chronic Pain Clinic

Research Article

Chronic Pain in Children: A Look at the Referral Process to a Pediatric Pain Clinic

- Retrospective, 75 patients-aged 3-20 years old
 - Average pain duration 34 +/- 55 months
 - Consulted average 3 physicians PLUS pediatrician
 - Missed at least 10 school days
 - Half stopped playing sports
 - 15% operation to reduce pain which were unsuccessful
- Reason for failure: noncompliance and uncontrolled/unrecognized mood disorder
- Post clinic visit
 - 70% returned to school and sports
- Take home message:
 - Pain clinic  last resort

Cucchiario G, Schwartz J, Hutchason A, Ornelas B. Chronic Pain in Children: A Look at the Referral Process to a Pediatric Pain Clinic. *Int J Pediatr.* 2017;2017:8769402

Pediatric Pain Screening Tool (PPST)

PPST items

Physical Subscale

My pain is in more than one body part.

I can only walk a short distance because of my pain.

It is difficult for me to be at school all day.

It is difficult for me to fall asleep and stay asleep at night.

Psychosocial Subscale

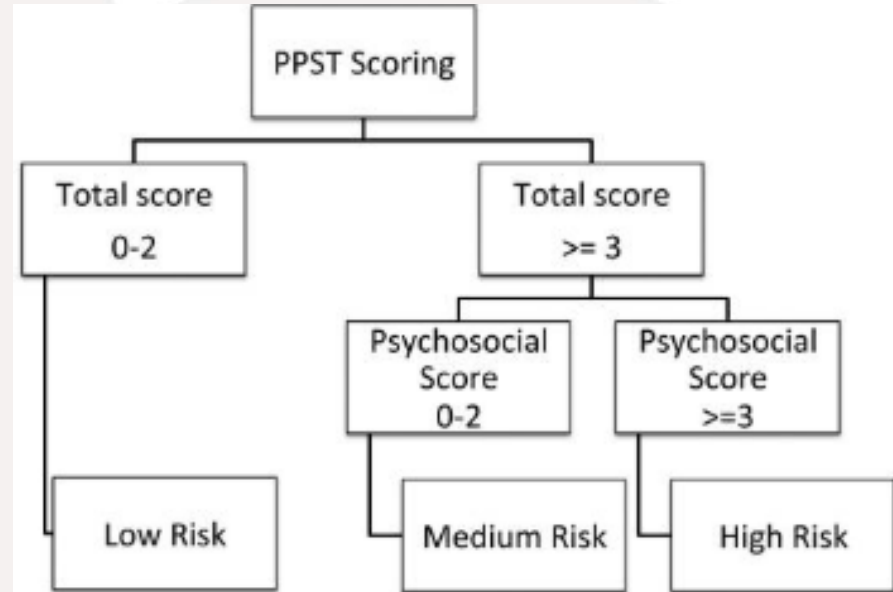
It's not really safe for me to be physically active.

I worry about my pain a lot.

I feel that my pain is terrible and it's never going to get any better.

In general, I don't have as much fun as I used to.

Overall, how much has pain been a problem in the last 2 weeks?*



- For medium and high risk, refer to pain clinic



Who are we?

Pediatric Hospitalist



PM&R



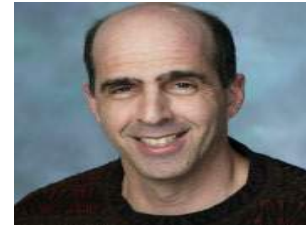
Comprehensive
Pain MDs



Psychologists



Acupuncturists



Pain Physical Therapists
not pictured

What does a Chronic Pain appointment look like?

Multidisciplinary Clinic (*Medical and Psychology*):

- Whole body pain
- Concerns for Complex Regional Pain Syndrome
- Postural Orthostatic Tachycardia Syndrome (POTS)
- School impairment or high functional disability
- Moderate to high risk on PPST

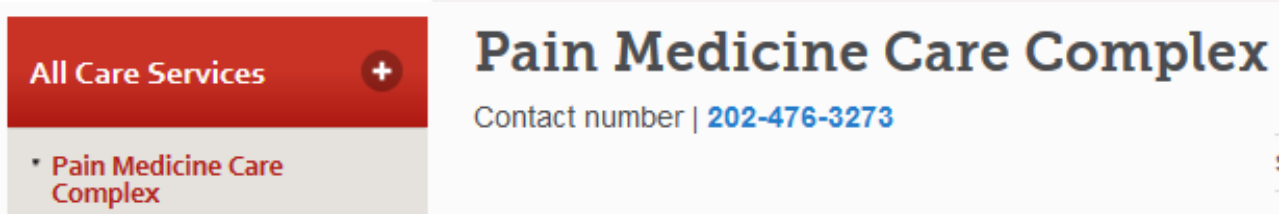
Medical Only:

- Younger than 5 years of age
- Postoperative pain follow up
- Bracing only
- Block evaluation



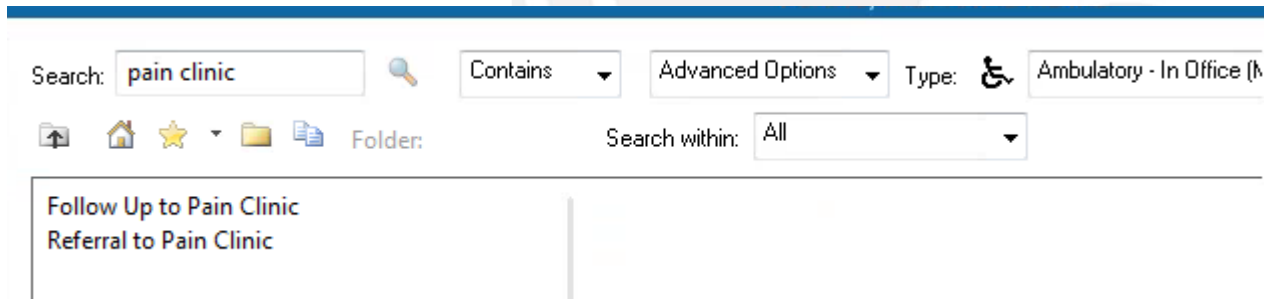
How to Refer to Chronic Pain Clinic?

1. Provide family with Clinic phone number



The screenshot shows a navigation menu on the left with a red header 'All Care Services' containing a plus sign. Below it is a grey dropdown menu with 'Pain Medicine Care Complex' selected. To the right, the text 'Pain Medicine Care Complex' is displayed in a large, bold, blue font, with the contact number '202-476-3273' in a smaller blue font below it.

- *Patient will dial #1 at the prompt to schedule an appointment*
2. If a provider within CNM, complete an internal referral



The screenshot shows a search interface with a search bar containing 'pain clinic'. To the right of the search bar are dropdown menus for 'Contains', 'Advanced Options', and 'Type' (set to 'Ambulatory - In Office'). Below the search bar are navigation icons (home, star, folder) and a 'Folder:' label. A 'Search within:' dropdown is set to 'All'. Below the search bar, two search results are visible: 'Follow Up to Pain Clinic' and 'Referral to Pain Clinic'.

Take Home Messages

- Evidence-based treatment of pediatric chronic pain is multidisciplinary
- Focus on rehabilitation, increase functioning
- Patients need an individualized plan to address school anxiety, return to school and return to functioning
- When in doubt: **DO NOT AGREE TO SIGN ANY SCHOOL FORMS** and refer



QUESTIONS?

Thank you for your attention today!



Children's National™

LOCATIONS

Main Campus

- All services (Pain MD, Psychology, Physical Therapy, Acupuncture)

Rockville

- Psychology
- Pain MD pending

Friendship Heights

- Psychology

Fairfax

- Psychology
- Pain MD pending