Managing Pain in Kids in the School Setting

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Disclosures

• None pertinent to this talk

Learning Objectives

• Pain conditions and biopsychosocial contributions to pain and disability
• Common medical treatments, recommendations, and school accommodations
• Developing IEPs and 504 plans that emphasize functioning
  – Responding to pain exacerbations with compassion
  – Encouraging return-to-class and independent pain management
• Discussion of specific case examples, including your examples and questions
These conditions are a PAIN

- Juvenile Arthritis / rheumatologic (Crohn’s, lupus, etc)
- Sickle-Cell disorders
- Abdominal pain (reflux, eosinophilic, etc)
- Headache (migraine, tension-type, etc)
- Chest pain
- Musculoskeletal pain (back, neck, knees, hips, hands)
- Amplified musculoskeletal pain (a.k.a. pain amplification)
  - the term “juvenile fibromyalgia” is also used but controversial
- Complex Regional Pain Syndrome

These conditions are REAL

- Sometimes it is easy to see reason for pain (e.g. arthritis)
- Sometimes it is not (headache, pain amplification)
  - These kids are experiencing real pain, regardless of whether it can be seen, and what they can do with pain, and what affects the pain
- All pain is worse with stress

These conditions are COMMON

- “Benign” chronic pain occurs in about 1 in 4 teens

Age-Specific Prevalence Rates of Chronic Pain
Tied together with “biopsychosocial” model

- Pain comes from physiological/medical factors as well as psychological, social, behavioral, historical and environmental contributions

Think Bio-Psycho-Socially!

- Physiological / Medical
  - Inflammation
  - Autoimmune processes
  - Autonomic dysregulation
  - Nerves get “practiced” at sending and receiving pain signals
  - Muscles guard and may spasm
Think Bio-Psycho-Socially!

• Psychological / Emotional
  – Stress affects immune system and muscle tension
  – Anxiety increases autonomic nervous system
  – Depression leads to less physical and social activity

Think Bio-Psycho-Socially!

• Behavioral / Environmental
  – Loss of friends reduces options for distraction
  – People do not listen/believe pain, which increases stress and anxiety

Pain is not merely sensory excitation
Common Treatments

• Medications
• Physical activity or physical therapy
• Adequate water and nutrition!
• Distraction (sensory and cognitive)
• “Biobehavioral” (usually relaxation-based)
  • Going to school!

Medications

• Pain killers (tylenol, opioids, patches/creams)
• NSAIDs, steroids
• Muscle relaxers
• Serotonin-targeting and anxiolytic
• Anti-seizure and blood pressure meds
• Anti-migraine meds or cocktails
• Antacid and antihistamines

Medications

• Medication may not be given for primary use:
  – Patient may have antiseizure or depression medication specifically for pain
• Meds have side-effects
  – Sedation, hunger, dizziness
• Some meds may need to be taken at school
  – Due to tid scheduling, or abortive purpose
Physical Activity

• Why does it help?
  – Stimulates nerves normally
  – Strengthens and supports joints

• Strategies
  – Moderation!
  – Stretching
  – Physical therapy
  – Yoga
  – Tai Chi

Adequate water; good nutrition

• Why does it help?
  – Promotes healing through normal body processes
  – May decrease inflammation
  – Allows medications to work their best

• Strategies
  – Aim for 64oz water daily
  – Variety of fresh foods including colorful fruits and veggies
  – Reduce processed foods and sugar

Distraction - sensory

• Why does it help?
  – Closes pain gate
  – May promote relaxation and healing
  – Releases feel-good neurotransmitters

• Strategies
  – Self-massage
  – Heat, cold, movement in water
  – Petting animals
  – Vibration
  – TENS
Distraction - sensory

- TENS example

![TENS example](http://www.comforttechnologies.com/)

Distraction - cognitive

- Why does it help?
  - Helps close pain gate
  - Adds fun activities
  - Releases feel-good neurotransmitters

- Strategies
  - TV, movies, video games,
  - Non-video games, books
  - Music, art, activities
  - Friends

Biobehavioral strategies

- Why does it help?
  - Regulates autonomic nervous system
  - Decreases overactive pain nerves
  - Promotes healing

- Strategies
  - Relaxed breathing
  - Progressive muscle relaxation
  - Imagery/self-hypnosis
  - Biofeedback
  - Yoga, acupuncture
School is IMPORTANT

- School provides:
  - Distraction (cognitive & sensory)
  - Physical activity
  - Social engagement
  - Oh, and education

Pain + school = HARD

School Absenteeism for Adolescents with Chronic Pain (School Report)

Change in Grades for Adolescents with Chronic Pain Since Onset of Pain
Again, school is **IMPORTANT**

- Full medical homebound contraindicated for most adolescents with chronic pain
  - May do more harm than good
- Commitment to regular school attendance despite pain is critical to prevent enduring disability
  - Avoid pattern of withdrawal
- Students retained in one grade are 50% more likely to drop out

Making school **WORK**

- IEP / 504 set out bidirectional expectations
  - Help kids succeed, spell out accommodations
  - Support teachers and staff
  - Hopefully provide clear guidelines for school nurse

Making school **WORK**

- Accommodations may facilitate regular attendance:
  - Rest/relaxation breaks in a quiet area (or classroom)
  - Ability to move around, stretch
  - Have water in classroom, take meds at school?
  - Extra time for tests/assignments
  - Modified PE curriculum
  - Assignments and grading limited to essential learning
  - Gradual reentry plan
Making school WORK

• School nurse expectations
  – What to do if patient comes to nurse’s office
    • How long can they stay, what do they do there?
    – Respond compassionately, while neutral or “matter-of-fact”
    – Encourage return-to-class when ready or as specified in plan
    – Allow independent pain management skills

Discussion

• Questions
• Clarifications
• Suggestions
• Case Examples