



# UNDERSTANDING POLYARTICULAR JUVENILE IDIOPATHIC ARTHRITIS (PJIA)

## FOR PRIMARY CARE PHYSICIANS

### PAIN SYNDROMES

#### NOMENCLATURE

- Chronic Widespread Pain (CWP)
- Chronic Pain Amplification
- Juvenile Fibromyalgia (JFM)
- Complex Regional Pain Syndrome (CRPS)/Reflex Sympathetic Dystrophy (RSD)
- Pain, NOS

#### CLINICAL PRESENTATION

- Chronic widespread musculoskeletal pain for >3 months
- 'Pan positive' review of systems (ROS)
- Fatigue often prominent feature associated with poor sleep hygiene
- "Do you feel rested on awakening"
- Unrefreshing sleep, daytime napping
- Often with some degree of anxiety/depression
- Exam unremarkable other than allodynia/hyperalgesia, tender points, possible joint hypermobility



#### MANAGEMENT OF CHRONIC PAIN

- Effective sleep hygiene is critical
- PT/OT particularly if hypermobile
- Manage expectations
- Medications are often not effective and there is no magic pill
- NSAIDs, TCA, GABA analogues, SSRI/SNRIs, integrative medicine
- May flare from time to time
- Routine movement/activity
- Psychology/CBT support
- Acknowledge pain diagnosis
- No FDA approved treatments for JFM
- Takes time to improve

### NON-INFLAMMATORY JOINT PAIN

#### DISTINGUISHING INFLAMMATORY AND NON-INFLAMMATORY CAUSES OF JOINT PAIN

|                                 | INFLAMMATORY JOINT SYMPTOMS         | MECHANICAL JOINT SYMPTOMS |
|---------------------------------|-------------------------------------|---------------------------|
| <b>Morning Stiffness</b>        | Yes                                 | No                        |
| <b>Joint Pain</b>               | No, exception – hip; neck; subtalar | Yes                       |
| <b>Pain with Activity</b>       | No                                  | Yes                       |
| <b>Symptoms Worse in a.m.</b>   | Yes                                 | No                        |
| <b>Awake from Sleep in Pain</b> | No                                  | Yes                       |
| <b>Intermittent Swelling</b>    | No                                  | Yes                       |
| <b>Fever</b>                    | Only with SJIA                      | No                        |
| <b>Rash</b>                     | With SJIA or Psoriasis              | No                        |

SJIA = Systemic onset Juvenile Idiopathic Arthritis



**For more information, please visit:**

<https://ohioaap.org/education-cme-moc-ii/polyarticular-juvenile-idiopathic-arthritis-pjia/>

## FOR PRIMARY CARE PHYSICIANS

## GENERALIZED HYPERMOBILITY

## A. Varying nomenclature and definitions

- a. Generalized Joint Hypermobility (GJH)
  - i. A Beighton Score of > 4/9
- b. Hypermobility Joint Syndrome
  - i. Musculoskeletal pain + GJH
- c. Benign Hypermobility Joint Syndrome (BHJS)
  - i. MSK pain + GJH w/o associated congenital syndrome or abnormality of connective tissue
- d. Ehlers Danlos Syndrome – Hypermobility Type III

B. Diagnosing joint hypermobility – The ability to **painlessly** perform the following five maneuvers...

## The Beighton Diagnostic/Scoring Criteria

| Specific Joint Laxity  | Right | Left    |
|--|-------|---------|
| Passive apposition of thumb to forearm                               |       |         |
| Passive hyperextension of fingers                                    |       |         |
| Active hyperextension of elbow >10 degrees                           |       |         |
| Active hyperextension of knee >10 degrees                            |       |         |
| Ability to flex spine and place palms to floor without bending knees |       |         |
|  |       | + 4     |
|  | + 4   | + 4 = 9 |

Beighton PH & Horan FT. Dominant inheritance in familial generalized articular hypermobility. *Journal of Bone and Joint Surgery British* 1970; 52 (1): 145-147.

## C. Management of Hypermobility Ehlers-Danlos Syndrome

Community Practice Support Tool – <https://www.cincinnatichildrens.org/professional/resources/community-practice-support-tools>

## RESOURCES

## FOR COPING WITH CHRONIC PAIN

“The Chronic Pain and Illness Workbook for Teens: CBT and Mindfulness-Based Practices to Turn the Volume Down on Pain” by Rachel Zoffness, Available on Amazon.

**WebMAP Mobile:** free for Android and iPhone, is designed to teach pain self-management strategies to youth with persistent pain. Developed at Seattle Children’s Hospital and tested in multiple clinical trials, the app offers a brief cognitive behavioral program (5-6 weeks) where teens (10-18 years) can learn about chronic pain, set goals for increasing physical activities, learn relaxation and imagery strategies, and receive interventions for problems with sleep and low mood.

## YOGA

**Cosmic Kids Yoga:** they have a number of different yoga videos with various themes (e.g., Halloween) and for various activities (e.g., conquering your fears)

- 5 Calming Yoga Poses for Kids: <https://www.youtube.com/watch?v=QeVh3NVfa0k>

**Smile and Learn Yoga:** they also have a number of yoga videos

- Yoga Children: Aquatic Animals Yoga Poses: <https://www.youtube.com/watch?v=z2UQ5-cVHjs>

## RELAXATION EXERCISES

**Calm:** Free; different meditations for reducing stress, improving sleep, enhancing concentration, etc.

**Stop, Breathe and Think Kids:** App helps kids assess their mood then choose from a variety of “missions” to enhance or improve how they feel. Great for school age children.

**GoNoodle** – Relaxation Activities (some videos are also in Spanish). Search for “stress.”

- Melting Away: <https://www.gonoodle.com/videos/r2rMeX/melting>
- Light as a Feather (Mindfulness exercise): <https://www.gonoodle.com/videos/r2rMeX/melting>
- Rainbow Breathing: <https://www.youtube.com/watch?v=O29e4rRMrV4>



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