The Many Faces of Pain in Transverse Myelitis

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Pain

“Pain is whatever the experiencing person says it is, existing whenever he/she says it does.”

Information on Pain in MS courtesy of Heidi Maloni, RN, CRNP, MSCN
Pain

• Pain is complex
• Pain is a sensory phenomenon
• Pain is not adequately defined, identified or measured by an observer
• Pain is an individual, learned and social response
Transverse Myelitis Pain

- Acute (back pain)
- Chronic
- > 50% experience chronic pain
- Severity of attack may contribute to more intractable pain
Common Types of Pain

• Neuropathic
  – Limb pain
  – Torso pain

• Paroxysmal motor spasms

• Musculoskeletal
  – Gait disturbances
  – Spasticity
Neuropathic Pain

- Described as burning, tingling, shooting, stabbing, electric shock-like, searing, and band-like discomfort
- Worse at night
- Responds poorly to standard analgesics
- Often need multiple therapies
Associated Symptoms

- Insomnia
- Anxiety
- Depression
- Weight loss
- Decreased quality of life
- Disturbed relationships
- Altered role
Management

• Medications
  ⇒ antiepileptics, antidepressants, antiarrhythmics, topicals, opioids, etc.

• Warm or cold compresses

• Pressure stockings

• Acupuncture

• Spinal cord stimulation

• Neurectomy, myelotomy, etc.
Pain Medications

- Amitriptyline
- Nortriptyline
- Imipramine
- Desiprimine
- Venlafaxine
- Duloxetine
- Mexilitene
- Lidocaine
- Capsaicin
- Lidoderm
- Carbamazepine
- Phenytoin
- Clonazepam
- Gabapentin
- Pregabalin
- Lamotrigine
- Topiramate
- Oxcarbazine
- Zonisamide
- Opioids
Pain Medications

• Start with a low dose and gradually titrate to efficacy.
• If partial pain relief occurs with one drug as monotherapy, a combination of two or more different classes of drugs can often yield better results.
• In general, when pain free for 3 months on treatment regimen, consider a slow taper.
Chronic Musculoskeletal Pain

- Weakness
  - Compensatory gait
  - Poor seating
- Stress on bones, joints and muscles
  - Spasticity
- Immobility (“use it or lose it”)
- Steroid induced osteoporosis
- Avascular necrosis
- Disc disease from mechanical stress
Management

• Prevention
• PT/OT assessment/intervention
  – Gait training
  – Assistive devices
  – Bracing/splinting/AFO
  – Seating
  – Exercise
• Heat, ice therapy
• Position change
• Manual manipulation, massage, yoga, tai chi, etc.
• Medications
  – Anti-inflammatory medications
  – Neuropathic pain medications
Spasticity
Spasticity

- Results from demyelination in the descending corticospinal, vestibulospinal, and reticulospinal CNS pathways
- Can be manifested in a variety of muscle groups depending on the lesion location
- Spasticity may increase over time without new CNS lesions
- Very cold temperatures may aggravate spasticity
- May mask weakness
Non-Pharmacologic Management

- Stretching
- Range of motion
- Positioning
- Education
- Thermomodalities
- Orthotics
- Relaxation
Pharmacologic Management

• baclofen (Lioresol®)
• tizanidine (Zanaflex®)
• diazepam (Valium®)
• clonazepam (Klonopin®)
• dantrolene sodium (Dantrium®)
• clonidine (Catapres®)
• gabapentin (Neurontin®)
Intrathecal Baclofen (ITB™)

**Advantages**
- Reversible
- Potential for lower side effects than PO
- Potential for lower doses than PO
- Evidence to support efficacy in reducing spasticity
- May improve function, comfort, and care

**Disadvantages**
- Complications: infection, catheter breakage, overdose, baclofen withdrawal
- Refills- approximately every 3 months
- Cost
Spasticity Management

• Injection therapy
  – Botox
  – Anesthetic/nerve blocks
Conclusions

- Pain syndromes are common sequelae of transverse myelitis
- Associated with other symptoms
- Pharmacological and non-pharmacological interventions are needed
- Multidisciplinary approach to treatment
Management

• Assessment – Carefully assess the potential causes of fatigue

• Interventions – Energy management – Medication – Aerobic exercise – Cooling therapy

• Requires a combination of interventions – No single remedy

• Requires multiple disciplines