

# 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.”

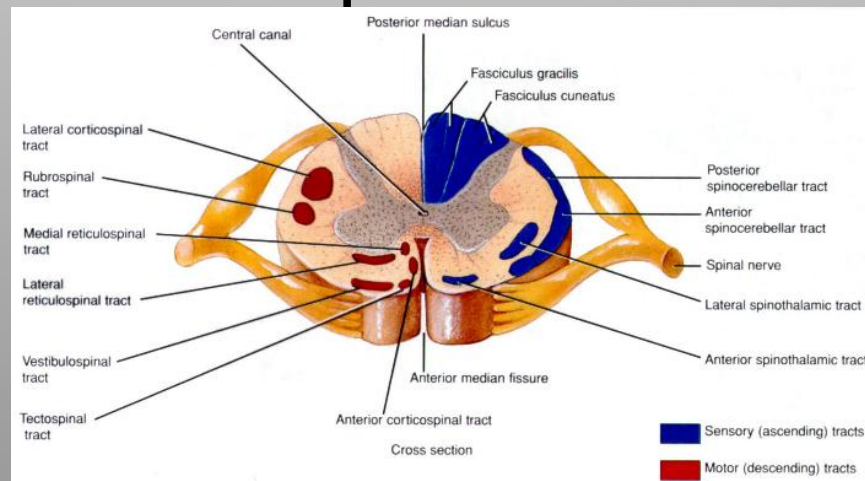
# Pain



- 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

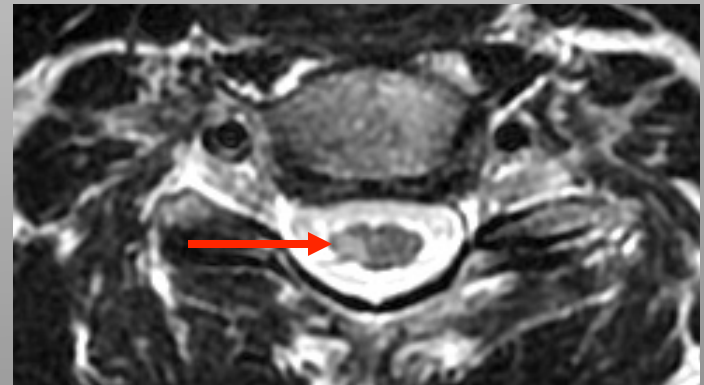
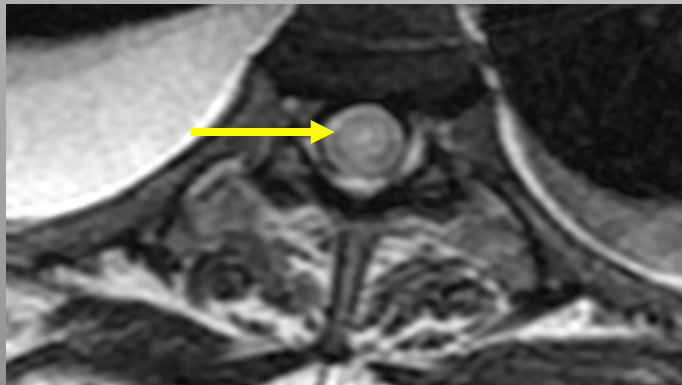
- Acute (back pain)
- Chronic
- > 50% experience chronic pain
- Severity of attack may contribute to more intractable pain



Complete TM



Partial TM



# 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
- Desipramine
- Venlafaxine
- Duloxetine
- Mexilitene
- Lidocaine
- Capsaicin
- Lidoderm
- Carbamazepine
- Phenytoin
- Clonazepam
- Gabapentin
- Pregabalin
- Lamotrigine
- Topiramate
- Oxcarbazine
- Zonisamide
- Opioids

# Pain Medications

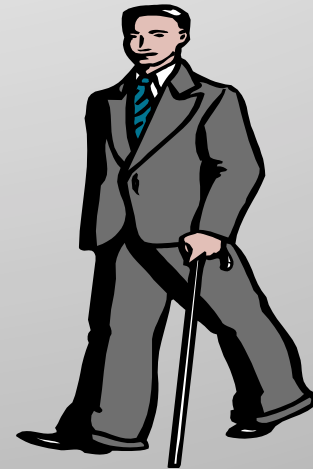
- Start with a low dose and gradually titrate to efficacy.
- If partial pain relief occurs with one drug as monotherapy, a combination of two or more different classes of drugs can often yield better results.
- In general, when pain free for 3 months on treatment regimen, consider a slow taper.

# 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

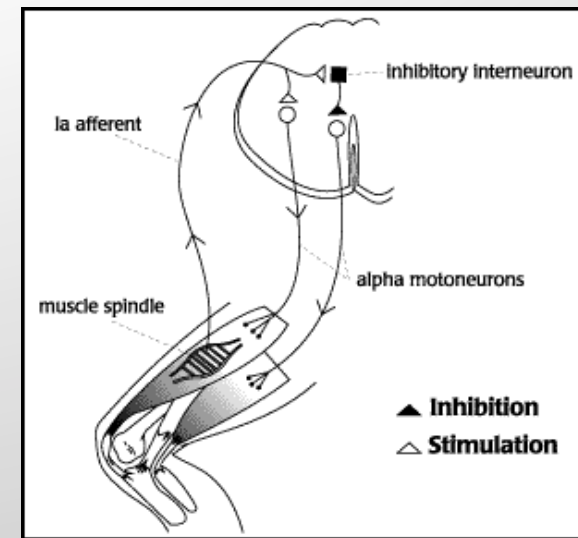


# Spasticity



# 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
- Thermomodality
- 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

