



**Neuro Café:  
2<sup>nd</sup> February 2022  
Pain**

# Pain in neurological diseases

- Chronic pain is a frequent component of many neurological disorders, affecting 20–40% of patients for many primary neurological diseases.
- Pain can result from a wide range of pathophysiology's including traumatic injury to the central nervous system, neurodegeneration and neuroinflammation
- Whether pain originates in the central or peripheral nervous system, it frequently becomes centralized through neuroplasticity (maladaptive responses) that can profoundly alter brain systems and thereby behaviour (e.g. depression, avoidance, heightened pain).

# Pain and you

- Pain is a very individual symptom. It takes many different forms, sometimes unusual ones. It changes over time and unlike many neurological symptoms, other people can't see it.
- Pain can be one of the most difficult 'invisible' symptoms to describe and manage.
- Only the person experiencing it knows how it feels. It has an emotional element – it can cause distress, fear, anger and frustration, which in turn affect how you deal with it.
- Pain can be exhausting, can affect your mood and your ability to do everyday activities.



What are the causes of pain for people living with a neurological condition?

# Different types of pain experienced within Neurological conditions

1. **Musculoskeletal:** pain that affects the bones, muscles, ligaments, tendons and nerves. It can occur suddenly or be long-lasting and can occur in one area or several.
2. **Neuropathic/radicular:** chronic pain condition where the body sends pain signals to the brain, not caused by an injury.
3. **Central pain:** neurological condition caused by a dysfunction that affects the central nervous system and is resistant to treatment.
4. **Dystonic:** sustained or repetitive muscle twisting, spasm or cramp that can occur at different times of day and in different [stages of Parkinson's](#).
5. **Akathisia:** causes the feeling of restlessness or inability to be still



## Examples of musculoskeletal pain in neurological conditions:

---

- **Hip and back pain** caused by alterations in how you move, walk due to neurological condition possibly because of muscle stiffness ([spasticity](#)), [weakness](#) or problems with [balance](#).
- **Back pain** due to sitting for long periods because of [fatigue](#), [walking difficulties](#) or inability to stand for long.
- **Muscle or joint pain** due to changes in [posture](#), [spasms](#) or muscle stiffness ([spasticity](#))
- Osteoarthritis development

# Examples of nerve pain in neurological conditions

- **painful altered sensation**, sometimes called dysaesthesia or paraesthesia, which can be described in a variety of ways including pins and needles, burning, numbness, prickling, itching and crawling
- **trigeminal neuralgia**, an intense painful sensation in the side of the face
- **Lhermitte's sign**, electric shock feelings in the neck and spine which are sometimes painful for MS patients when flex their necks
- **optic neuritis** which can give a sharp, knife like pain behind the eyes and sometimes also causes difficulties with vision
- **the MS hug** (banding or girdling). This is a feeling of chest pain, rib pain, tightness or being squeezed around the chest, although it can be around the hands, feet, legs or head.
-

Disease	Prevalence of pain	Pain symptoms	Co-morbid depression
Parkinson's disease	40–60%	Musculoskeletal Dystonic Radicular Central neuropathic	15–30%
Multiple sclerosis	50–86%	Extremity pain, trigeminal neuralgia, Lhermitte's sign, painful tonic spasms, back pain and headache.	50%
Post-stroke	30%	Musculoskeletal, spasms, shoulder pain Neuropathic, headaches,	36%
Spinal cord injury	64.9%	Spasms, infections, skin	20%
Traumatic brain injury	57.8%	Continuous headache, Autonomic dyscontrol CRPS, neuropathic pain, , musculoskeletal	10-77%
GBS	89%	Neuropathic pain Musculoskeletal	20%
Tumours	>60%		Not reported
Huntington's	Not known	Myopathic pain Central pain?	40%

# Words that people use to describe their pain associated with neurological conditions

- squeezing or crushing
- cold
- hot or burning
- sharp
- dull
- like ants under my skin or 'creepy crawlies'
- like a build up of pressure
- stabbing
- creeping
- like an electric shock
- aching
- pins and needles



## Describing Words - **PAIN**

- 
- |              |              |                |               |
|--------------|--------------|----------------|---------------|
| • Ache       | • Trouble    | • Sting        | • Cool        |
| • Agony      | • Twinge     | • Stitch       | • Rasping     |
| • Burn       | • Wound      | • Throb        | • Taut        |
| • Cramp      | • Affliction | • Throe        | • Boring      |
| • Discomfort | • Catch      | • Tingle       | • Beating     |
| • Fever      | • Convulsion | • Torture      | • Constant    |
| • Illness    | • Crick      | • Flickering   | • Heavy       |
| • Injury     | • Distress   | • Electrical   | • Dull        |
| • Irritation | • Gripe      | • Waves        | • Flashing    |
| • Misery     | • Hurt       | • Sore         | • Vicious     |
| • Sickness   | • Laceration | • Sharp        | • Nagging     |
| • Soreness   | • Malady     | • Hot          | • Piercing    |
| • Spasm      | • Pang       | • Intermittent | • Distressing |
| • Strain     | • Paroxysm   | • Itchy        | • Grating     |
| • Tenderness | • Prick      | • Tingling     | • Tearing     |
| • Torment    | • Smarting   | • Numb         | • Miserable   |

# Describing your pain experience to your GP / therapist

- Before appointments think about this helpful checklist to allow you to describe your pain well at an appointment
  - take a pain diary or notes with you to help you remember and help the professional help you
  - where the pain is in your body
  - how the pain feels
  - how long the pain lasts
  - what time of the day the pain occurs and how often
  - whether the pain is worse at certain times of day
  - any other details about the pain you think are important for the professional to know

**PAIN LOG**



1 2 3 4 5 6 7 8 9 10  
No pain Mild pain Moderate pain Severe pain Worst pain imaginable

Day	Time	Scale	Type of pain	Activities causing pain	Symptoms	Medicine or supplements
1						
2						
3						
4						
5						
6						
7						

# Recording your pain

- Another thing that's important to put in your diary is how much the pain interferes with things like:
  - sleeping
  - washing
  - getting dressed
  - work
  - moving around
  - enjoying your hobbies

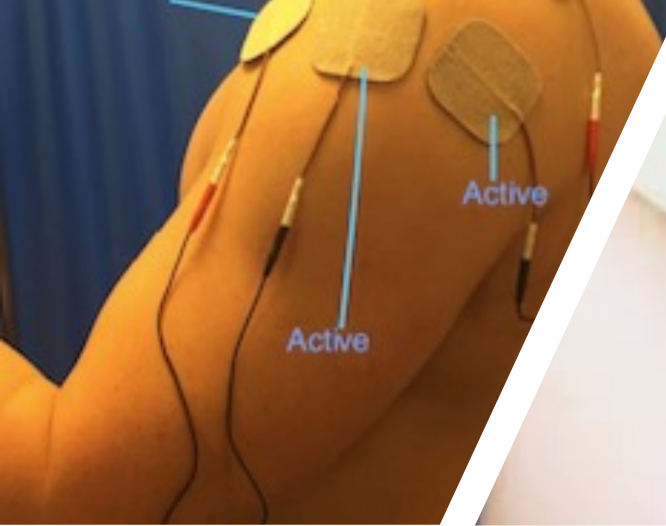


# OLDCARTS !!!

Judging your pain using the 'OLD CARTS' abbreviation	
Things to make a note of	What you should write down
Onset	When did your pain start?
Location	Where in your body do you feel the pain?
Duration	How long does your pain last?
Characteristics	How would you describe your pain? For example, is it a sharp, dull, aching or a tingling sensation?
Aggravating factors	Does anything make your pain worse? Examples could be hot or cold weather, stress or doing too much or too little
Relieving factors	Does anything make the pain better? Examples could be resting, or changing how you stand or sit
Treatments	What are you doing or taking to relieve your pain?
Severity	How would you rate your level of pain on a scale of 0 to 10, when 0 = no pain and 10 = the worst pain you can imagine? It might help to score your pain at the same time twice each day. Using the same scale. you could score your fatigue level (how tired you feel) and your mood. You'll then understand how these two things affect your pain levels.



Treatment for  
post stroke pain



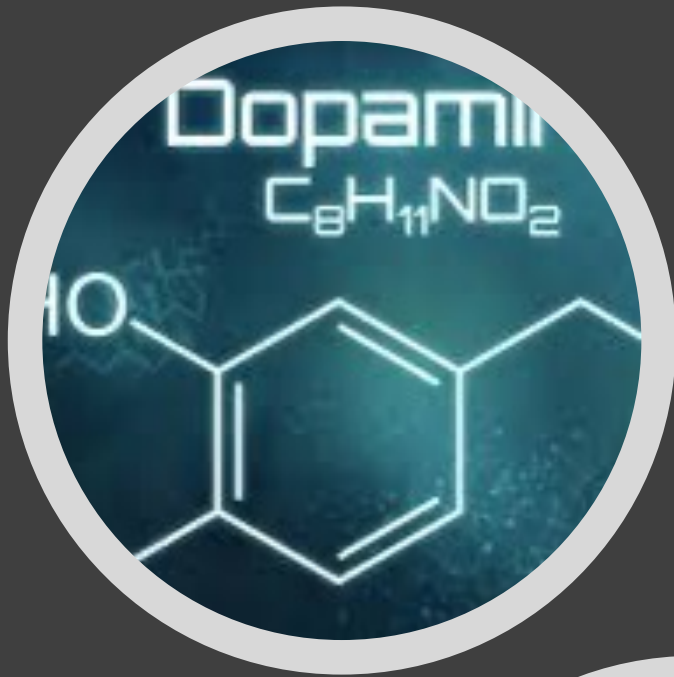
tioning for hemiplegic patients



Source: pinterest.com



Treatment for  
post stroke  
shoulder pain



## Treatment for pain in Parkinson's Disease





Treatment for Central  
pain with neurological  
conditions



## Alternative or complementary therapies

---

- Alternative or complementary therapies may be helpful in some cases:
  - Acupuncture
  - Massage
  - Aromatherapy
  - Meditation
  - Yoga

# Tame the Beast

It's time to rethink persistent pain



# Other sources / support

- **Action on pain**

- Website: **[action-on-pain.co.uk](http://action-on-pain.co.uk)**

PainLine: **0345 603 1593**

A charity run by volunteers who are all affected by chronic pain in some way. Provides information and advice about pain, and raises awareness of those living with chronic pain.

- **The British Pain Society**

- Website: **[britishpainsociety.org](http://britishpainsociety.org)**

Tel: **020 7269 7840**

Professional body promoting best practice in supporting patients with pain. Provides patient information about pain and managing pain.

- **NHS Pain Management Programmes (PMP'S)**
- PMP's are in some areas. Your GP can help you find a local PMP or go to:
- **[www.britishpainsociety.org/patient\\_pmp.htm](http://www.britishpainsociety.org/patient_pmp.htm)**
- Remember PMP's and SMP's can provide you with many self-management tools, *but you have to do the work.*

