

Functional Neurological Disorders Meeting Question and Answers

Wednesday 12th July 2023

7.30pm – 9.50pm

1. How many colleagues in your role are there locally?

No specialist service locally in Calderdale and Kirklees. Some physiotherapists have an awareness of FND. Liz is the only private physiotherapist specialising in FND in local area that she knows of.

Leeds – Dr Williams is a Neurologist with an interest in neuro-rehabilitation. May have restrictive referral criteria though.

Nationally – Sheffield has a FND service. London has 2-3 FND services. St Georges University Hospital – Dr Mark Edwards has done lots of research on FND. Professor Bhattia – National Hospital of Neurology and Neurosurgery, Queens Square, London.

FND Hope website is a good resource to find providers but important to send referrals locally so that can highlight the need for a specialised service.

2. Have you seen an increase in functional neurological disorder triggered by covid infection? or with long covid?

Massive debate regarding FND and some claim it doesn't exist. People can have long covid and FND. Carson suspects some of Long Covid could be FND but too early to be definitive about anything!

3. With the impaired /inefficient attentional shifting being common in chronic pain, is chronic regional pain syndrome (CRPS) following an injury classed as a functional neurological disorder?

CRPS requires fulfilment of Budapest criteria to make a diagnosis.

Have to have allodynia and swelling in the limb and autonomic changes. Sympathetic chain can be damaged.

CRPS is different to FND. If CRPS is not treated early, can develop FND.

To make the clinical diagnosis, the following (Budapest) criteria must be met:

- Continuing pain, which is disproportionate to any inciting event.
- Must report at least one symptom in all four of the following categories:
 - sensory – reports of hyperaesthesia and/or allodynia

- vasomotor – reports of temperature asymmetry and/or skin colour changes and/or skin colour asymmetry
- sudomotor/oedema – reports of oedema and/or sweating changes and/or sweating asymmetry
- motor/trophic – reports of decreased range of motion and/or motor dysfunction (weakness, tremor, dystonia) and/or trophic changes (hair, nail, skin).
- Must display at least one sign at time of evaluation in two or more of the following categories:
 - sensory – evidence of hyperalgesia (to pinprick) and/or allodynia (to light touch and/or temperature sensation and/or deep somatic pressure and/or joint movement)
 - vasomotor – evidence of temperature asymmetry (> 1 °C) and/or skin colour changes and/or asymmetry
 - sudomotor/oedema – evidence of oedema and/or sweating changes and/or sweating asymmetry
 - motor/trophic – evidence of decreased range of motion and/or motor dysfunction (weakness, tremor, dystonia) and/or trophic changes (hair, nail, skin)
- There is no other diagnosis that better explains the signs and symptoms.

<https://www.ncbi.nlm.nih.gov/books/NBK464482/#:~:text=Must%20report%20at%20least%20one,changes%20and%20for%20sweating%20asymmetry>

4. Can FND resolve on its own? How long does it tend to last if it does? Should we give time for symptoms to improve on their own before referral to neurology for diagnosis?

Can get patients with short lasting episodes, especially in younger patients with stress but there are risk of issues in the future so should treat early.

If positive signs and multiple symptoms of FND then should refer as the longer the situation goes on without answers, the more changes to the patient's neurocircuitry that happen and affect the prognosis regarding recovery.

Most patients take years to recover rather than months in Liz's experience.

Passive treatments reinforce illness beliefs.

5. Can RTA/whiplash injuries trigger FND? Your case example made me wonder about patients who claim to have symptoms and are seeking compensation but the expert examining does not find that the symptoms/ signs are consistent and conclude that they are "faking" it/malingering

RTA and whiplash can trigger FND.

People with secondary gain or malingering tend to stop seeking treatment / support when the claim is settled. They just disappear.

Genuine cases keep coming back as desperate. They refer themselves to every service available!

Wouldn't change what you would do even if suspected possible secondary gain or not genuine FND as difficult to know until after the claim is settled... so give everyone the benefit of the doubt.

6. Is there a hereditary predisposition to FND? Does it run in families? Do family members have an increased risk of FND if one member is diagnosed with it?

It is likely that there is a hereditary predisposition but cannot be sure regarding cause and effect. Impact of being around someone who is chronically ill probably has more effect than just having a family history of FND.

7. Does age at onset of FND affect prognosis?

Younger patients have greater neuroplasticity and so tend to have a better prognosis as a result.

Neuroplasticity, also known as **neural plasticity**, or **brain plasticity**, is the ability of neural networks in the brain to change through growth and reorganization. It is when the brain is rewired to function in some way that differs from how it previously functioned.^[1] These changes range from individual neuron pathways making new connections, to systematic adjustments like cortical remapping. Examples of neuroplasticity include circuit and network changes that result from learning a new ability, information acquisition, environmental influences, practice, and psychological stress.^{[2][3][4][5][6][7]}

Neuroplasticity was once thought by neuroscientists to manifest only during childhood,^{[8][9]} but research in the latter half of the 20th century showed that many aspects of the brain can be altered (or are "plastic") even through adulthood.^[10] However, the developing brain exhibits a higher degree of plasticity than the adult brain.^[11] Activity-dependent plasticity can have significant implications for healthy development, learning, memory, and recovery from brain damage.^{[12][13][14]}

<https://en.wikipedia.org/wiki/Neuroplasticity>