

Functional Neurology

What is it, what does it look like and why should I care?



Background

- “medically unexplained symptoms” are as old as medicine itself and, on that basis, are unlikely to “go away” just because we would prefer them to
- have sailed under many diagnostic banners over the years
 - ▶ hysteria (the “wandering womb”)
 - ▶ conversion disorders
 - ▶ dissociative disorders
 - ▶ psychogenic
 - ▶ functional
 - ▶ non-organic
 - ▶ psychosomatic

Functional symptoms

- overtaking the older terminology, at least for now, is “functional”
- somewhere between 5-10% of all new outpatient neurology referrals have a presumed principal functional diagnosis - pain, fatigue, sensory symptoms, seizures, movement disorders, weakness, visual loss
- accounts for between 1-10% of inpatient neurology admissions
- 50% of “status epilepticus”, 10% of “first fits”, 5% of movement disorders
- functional weakness as common as MS on the basis for these figures - and perhaps as disabling

Yes, but that's Neurology...

Speciality	Symptom
Cardiology	non-cardiac CP
Gastroenterology	IBS
Respiratory	chronic cough, brittle asthma
Renal	recurrent loin pain
Surgery	chronic abdominal pain
Rheumatology	fibromyalgia
ID	chronic fatigue syndrome

Non-epileptic attacks

- commoner than you might think
- can co-exist with epilepsy
- can be very convincing and the basic rule is that you can suspect NEAs but proving it is down to the experts
- many patients end up intubated and ventilated due to “non-epileptic status”
- so it is helpful to have an idea of how to spot them

Clues

- how do they start? what is the warning?
- patients with 1° generalised seizures don't get an aura
- 2° GTC seizures have a focal onset before generalising
- TLE often has a prodrome (brief) and “always” the same
- frontal seizures can be very strange indeed but are usually the same strange every time
- NEAs often have a prodrome but patients need considerable encouragement to describe it
- often a sense of feeling “unreal” and “detached” or even a sense of rising panic
- often variable in presentation (but not always)

Clues

- what happens next? how does the attack evolve?
- people are very poor at describing “seizures”
- jerking, thrashing, twitching don’t really help that much
- is there a “tonic” phase?
- what does the jerking look like?
- many patients with NEAs fall down and lie still (25%)- this is very unusual in epilepsy
- how long do the attacks go on for?
- more than 5 minutes is less likely to be a seizure but remember that people will be very poor at judging length

Clues

- what do they look like if you see them?
- helpful clues to NEAs
 - ▶ gradual onset
 - ▶ violent thrashing or side-to-side head movement
 - ▶ resisting eye opening
 - ▶ rapid breathing, particularly in the run up to an attack
- not so helpful
 - ▶ incontinence
 - ▶ tongue biting - unless severe and on the side of the tongue
 - ▶ self-injury and response to pain during attack

Epilepsy or not?

- case one

- ▶ 34 year old woman
- ▶ 5 year history of attacks - 3/ month
- ▶ warning before each attack - feeling of panic rising
- ▶ witnesses notice her acting in a strange fashion and looking vacant
- ▶ wandering about and mumbling
- ▶ lasts a few minutes at most
- ▶ not herself for some time thereafter

- case two

- ▶ 26 year old woman
- ▶ diagnosed with epilepsy 3 years ago
- ▶ on lamotrigine 100mg bd but still having attacks 5 times a week
- ▶ some warning but vague on description
- ▶ no recollection of the events at all
- ▶ drops to the ground at times and has bruised herself
- ▶ jerking for 5-10 minutes then gradual recovery

Other functional presentations

- **weakness** - gradual onset or sudden, can present like a stroke
- **sensory loss** - “split down the middle” is a common presentation (but can be due to a thalamic lesion); limb sensory symptoms that stop at the groin or shoulder
- **tremor** - variable and entrainable
- **dystonia** - often fixed, can be very bizarre with secondary skin changes, very disabling
- **gait disorders** - dragging leg, crouching gait, tightrope gait without falling
- **cognitive decline** - many patients complain of subjective cognitive problems although can usually give a very clear account of them!
- **visual loss** - less common in neurology than in ophthalmology; tubular fields or blindness with preserved pupil reflexes and optico-kinetic nystagmus

Ingredient	Example
Explain what they do have...	<p>“You have functional weakness”</p> <p>“You have dissociative seizures”</p>
Emphasise the mechanism of the symptoms rather than the cause	<p>Weakness: “Your nervous system is not damaged but it is not functioning properly”</p> <p>Seizures: “You are going into a trance-like state a bit like someone being hypnotised”</p>
Explain how you made the diagnosis	Show the patient their Hoover’s sign or dissociative seizure video.
Explain what they don’t have	“You do not have MS, epilepsy” etc
Indicate that you believe them	“I do not think you are imagining/making up your symptoms/mad”
Emphasise that it is common	“I see lots of patients with similar symptoms”
Emphasise reversibility	“Because there is no damage you have the potential to get better”
Emphasise that self-help is a key part of getting better	“This is not your fault but there are things you can do to help it get better”
Metaphors may be useful	<p>“The hardware is alright but there’s a software problem”; “It’s like a car/piano that’s out of tune”; “It’s like a short circuit of the nervous system” (dissociative seizures)</p>
Introducing the role of depression/anxiety	<p>“If you have been feeling stressed/low/worried that will tend to make the symptoms even worse” (often easier to achieve on a second visit)</p>
Use written information	Send the patient their clinic letter. Give them some written information
Stop the antiepileptic drug in dissociative seizures	<p>If you have diagnosed dissociative seizures and not epilepsy, stop the antiepileptic drug. Leaving the patient on the drug is illogical, makes no sense to the patient and will hamper recovery</p>
Suggesting antidepressants	<p>“So-called antidepressants often help these symptoms even in patients who are not feeling depressed. They are not addictive.”</p>
Making the psychiatric referral	<p>“I don’t think you’re mad but Dr X has a lot of experience and interest in helping people like you to manage and overcome their symptoms. Are you willing to overcome any misgivings about their specialty to try to get better?”</p>
Involve the family/friends	Explain it all to them as well

Functional and Dissociative Neurological Symptoms : a patient's guide



Welcome

Symptoms

Causes

In the mind?

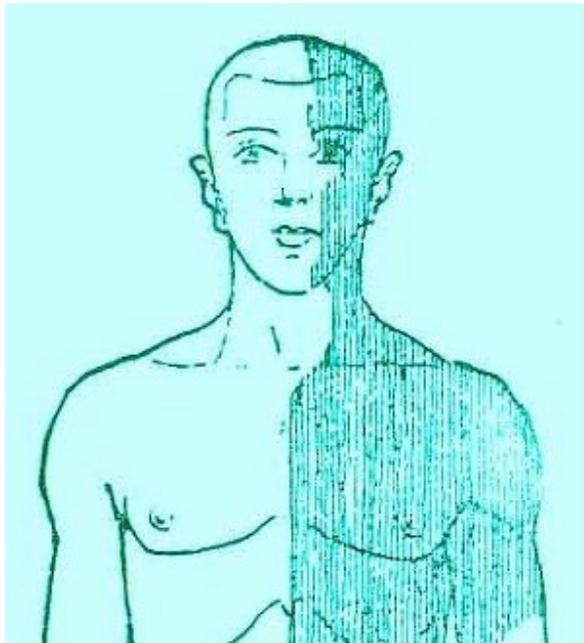
Misdiagnosis?

Treatment

Feedback

Stories

Links Download



This website is about symptoms which are:

- neurological (such as weakness, numbness or blackouts)
- REAL (and not imagined)
- and due to a PROBLEM with the FUNCTIONING of the nervous system, and NOT due to neurological disease.

These symptoms have many names (including dissociative symptoms and conversion symptoms) but are often described as "functional symptoms" or "functional disorders"

Symptoms like these are surprisingly common but can be difficult for patients and health professionals to understand.

This website, written by a neurologist with a special interest in these problems, aims to give you a better understanding of these symptoms. It has no advertising and does not make any money for the author.

Different language?
Click on the flag

- Swedish
- Spanish
- Russian
- Portuguese
- German
- Dutch
- Italian
- French
- Czech
- Slovak
- Japanese
- Greek

How to use this website ...

Most people with functional or dissociative neurological symptoms have a combination of symptoms like "weakness, numbness and fatigue" or "blackouts and sleep problems"

Click on a symptom on the right or use the menu above to explore the symptoms that are relevant to you.

Click on 'Causes' to discover what is known about....

- what is going wrong in the body when they do happen. (Mechanisms) and why people become vulnerable to these symptoms. (Causes)

Symptoms ...

- Functional Limb Weakness
- Functional Tremor
- Blackouts / Attacks
- Functional Dystonia/Spasm
- Sensory Symptoms
- Functional Walking Problems
- Pain
- Word Finding Difficulty
- Tiredness / Fatigue
- Slurred Speech
- Sleep Problems
- Bladder Symptoms