

Functional Attacks or Seizures

Patient Information



What are functional attacks or seizures?

They are part of a diagnosis of Functional Neurological Disorders. This is a group of symptoms that are neurological in nature, meaning that they signal a dysfunction of the nervous system (brain).

The most frequent symptoms are:

- Episodes with tremors/jerks/cramps of a body part or the whole body
- Episodes with complete absence of movement that may be accompanied by a fall
- Episodes of loss of contact with inability to communicate with others

Symptoms may be accompanied by loss of consciousness (the patient has no memory of the event) or the patient may remain conscious of his/her environment but cannot respond.

Is this a rare disorder?

No, these disorders actually represent one of the most frequent causes to go and see a neurologist.

Are there any other names?

These attacks can look very similar to epilepsy but the underlying mechanism is not the same. Some doctors therefore also use the term non-epileptic seizure.

Attacks can also look like syncope (drop in blood pressure) but cardiological tests are normal. The term pseudo-syncope is also used.

During the attacks patients can feel «cut off/dissociated» from the outside world and the term dissociative seizure is also used.

How is the diagnosis made?

The diagnosis requires that your doctor finds specific positive signs during observation of a typical attack (see images).



You need to bring a video of your seizure to your doctor so that he/she can see it. Sometimes your doctor will need a video-electroencephalography (VEEG) examination to film a typical episode and simultaneously record the electrical activity of the brain and/or additional procedures such as blood tests or brain MRI (Magnetic Resonance Imaging). However, these tests are not mandatory. If you have any doubts about the tests performed in your case, it is important to discuss them directly with your doctor.

What is the cause?

The cause of functional neurological disorders is not known, just as it is the case for other neurological diseases (Parkinson's disease or multiple sclerosis). However, research has shown that there are several factors that can contribute to the development of functional disorders:

- a physical shock (a fall, illness, panic attack, surgery or medical treatment)
- a psychological shock (stressful life event)

Sometimes functional neurological disorders occur without such a shock.

Research in neurosciences also studies the influence of:

- lifestyle (stress, fatigue)
- hereditary or genetic factors

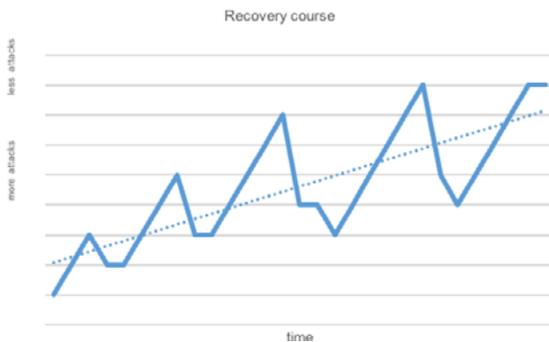
What is the mechanism?

The mechanism responsible for the symptoms is known (unlike the cause), as is the mechanism of Parkinson's disease (decreased dopamine production) and multiple sclerosis (inflammation).

For functional neurological disorders, the mechanism is a disorder of brain function. If we compare the brain with a computer, there is a programming problem, so there is a «software» problem. The brain itself is not damaged; the «hardware» is intact. This explains why most tests (blood, MRI) are normal (hardware) while clinical tests (positive signs during the attack) are abnormal (software).

Can it be cured?

Yes, because the mechanism is reversible (the software can work again). The course of symptoms varies greatly from one patient to another. There are rapid recoveries but most often the evolution is characterized by a slow and gradual improvement (see graphic below). There can be fluctuations and periods when symptoms become more pronounced again (more attacks). It is therefore important not to get discouraged when things get worse: instead looking at the general improvement line that shows an evolution towards the best is helpful. Some patients have a complete disappearance of attacks after treatment. For others, attacks remain present but are better tolerated, shorter and/or can be partially controlled.



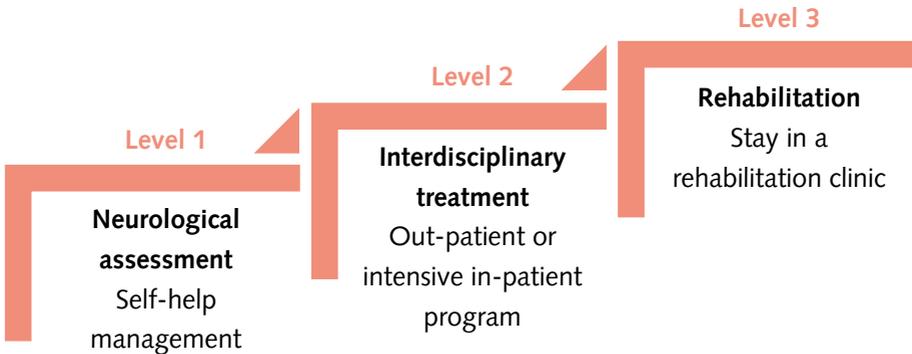
Are there associated symptoms?

Sometimes functional neurological disorders are accompanied by several other difficulties that have an impact on quality of life such as:

- Headaches
- Pain in various parts of the body
- Sleep disorders
- Fatigue
- Difficulties with concentration
- Forgetfulness
(where did I put my keys?)
- Sense that sometimes the environment is foreign or unreal
- Panic attacks
- Sadness or anxiety
- Loss of interest in engaging in activities
- Difficulties in managing emotions
(frustration, anger, discouragement)

What is the treatment?

The treatment is declined in three levels:



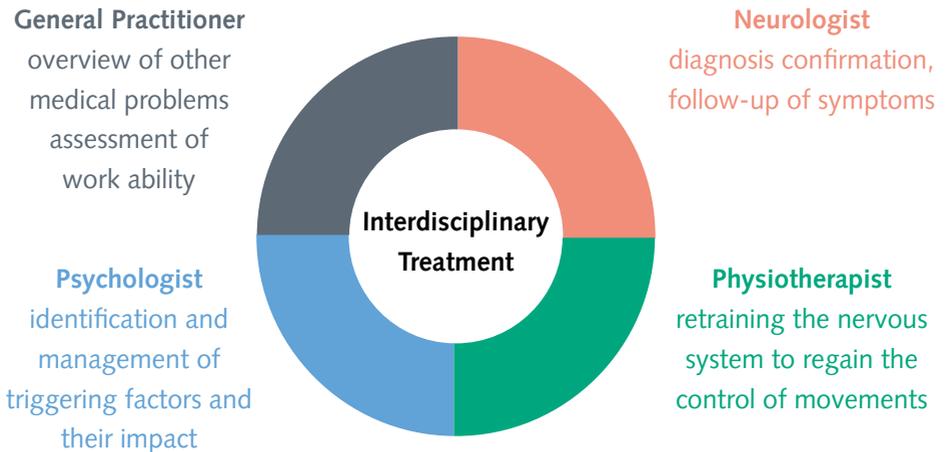
For some patients LEVEL 1 treatment leads to recovery within a few weeks.

For other patients a LEVEL 2 interdisciplinary program is needed. Depending on the needs of the patient, an out-patient setting or in-patient setting (intensive hospitalization 1–3 weeks).

For other patients, longer hospitalizations in rehabilitation clinic can be organized (LEVEL 3).

What is an interdisciplinary program?

This program allows several professionals to work together in an integrated network: Neurologist, Psychologist, Physiotherapist in collaboration with the General Practitioner.



What can I do to get better?

Research has shown that patients who have understood and accepted their diagnosis are improving quicker. It is therefore important that you do not keep any doubts about your diagnosis, so:

- Ask your questions to your therapists and search for information.
- If an unusual episode occurs at home, film it and show it to your doctor.
- Learn to observe your body and the influence of external factors (noise, food, climate etc.) as well as internal factors (emotions, thoughts).

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www.fndhope.org
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