

Functional Myoclonus



What is Functional Myoclonus?

Functional myoclonus refers to sudden jerky or shock like movements that occur as part of a functional movement disorder.

Myoclonus is a symptom found in a wide range of neurological diseases as well as some normal states.

Most people have had the experience of jumping or jerking as they are dropping off to sleep. These movements are called 'hypnic jerks'.

Most people are also familiar with the random body 'shudder' that some people get. This is sometimes described as 'walking on someone's grave' because of the way it moves quickly through the body.

The occasional hypnic jerk or a body shudder are normal. But in functional myoclonus the jerks become a frequent and disabling problem.

There may be jerks of the arms or legs, or quite commonly there is jerking in the body. The movements are unwanted and not under conscious control.

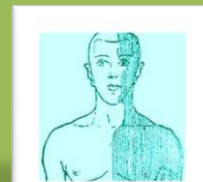
How does it begin?

Functional myoclonus often begins quite suddenly (in around two thirds of cases) but may be gradual. It affects patients somewhat later than some of other symptoms described on this website. For example in one series of 35 patients the average age it started was 45. It may follow on from one of the following situations

1. A physical injury. Functional myoclonus may occur as part of complex regional pain syndrome. Jerks in the trunk commonly accompany back pain.
2. After experiencing myoclonus from a medical problem such as
 - a. a side effect of a medication
 - b. a faint with some jerky movements
 - c. an infection
 - d. a period of hospitalisation in intensive care
3. After having a "fright" or a panic attack
4. With a symptom called 'dissociation' (spaced out or 'zoned out') which can happen without any feelings of fear.

FACTSHEET

Functional Myoclonus



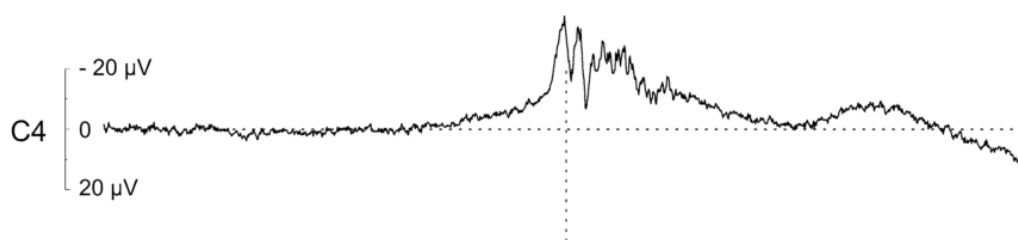
5. An underlying mild additional cause of myoclonus which has become 'amplified' because of functional myoclonus.

How is the diagnosis made?

The diagnosis of functional myoclonus is usually made by a neurologist. It can be difficult diagnosis to make because it requires expert knowledge of the full range of jumps and jerks due to neurological disease, many of which are unusual .

The following are some examples of things a neurologist would look for to diagnose functional myoclonus

1. Jerks of the trunk (i.e. body) rather than the legs
2. Sudden onset of the condition "out of the blue" with no other obvious disease cause
3. Involvement of the face and/or voice in a patient who otherwise has bodily jerks
4. Flexion jerks of the trunk when walking
5. Jerks which can be suppressed or delayed by the patient using distraction techniques
6. In some research settings the patient can have an investigation called 'EEG jerk-locked back averaging'. This is to look for changes in the brain wave (EEG) that typically precede the jerk in patients with functional myoclonus. This change is called a Bereitschaftspotential (BP). You can only see this if you record lots of jerks in one individual. This is a difficult investigation to carry out and is more of a research tool than a routine test.

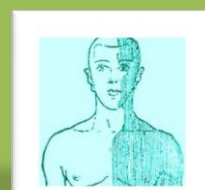


This tracing shows a Bereitschaftspotential (BP) in a patient with functional myoclonus

Over half of patients with functional myoclonus describe warning symptoms before some of their jerks. These may last just seconds or sometimes minutes. Some patients describe a rising sense of tension which somehow the jerk gets rid of temporarily. So they don't want to have the jerk but it is doing something useful, some of the time. Understanding this can be useful in treatment

If you don't get any warning then don't be put off by the paragraph above. It doesn't apply to everyone with functional myoclonus.

FACTSHEET



Am I imagining it then?

The answer is 'no' but look at 'In the mind?' on www.neurosymptoms.org to find out more

What is the treatment?

Have a look through the pages on treatment on www.neurosymptoms.org for more information but here are some specific points

Do you have confidence in the diagnosis?

It is essential that you feel that you have the correct diagnosis. If you don't it will be hard to put into practice the rehabilitation techniques suggested here.

If you don't feel that you have functional myoclonus you need to look at what basis the diagnosis has been made. You should have some of the clinical features described above. If you do, why don't you have confidence in the diagnosis you have been given?

You do not need to be stressed to have functional myoclonus. In fact functional myoclonus is often most noticeable when people are relaxed or not thinking about anything in particular. Perhaps you rejected the diagnosis because the doctor suggested it was "stress related"? - there may have been a misunderstanding if that was the case.

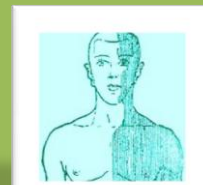
We know that many patients with functional myoclonus do have stress as a cause of their symptoms, but many don't. So whether you have been stressed or not is not relevant to the diagnosis.

Specific techniques

The treatment of functional myoclonus is quite challenging. Usually the problem has been going on for some time and has become a 'habit' that the brain has got in to. The following may be worth considering

1. If you do get even the slightest **warning phase** then try to use distraction techniques to see if you can avert a jerk. You can use the same techniques that are described for dissociative attacks. Some patients report that when they do this they can be successful but then have a jerk or series of jerks that are even worse immediately afterwards. But keep trying - you may find its one way to 'break the habit'.
2. **Are you expecting to have jerks at a certain time?** - for example when you lie down at night to sleep or are in a public place. The way the brain works means that sometimes if you really expect something to happen, it will, even though you don't want it to. This is called a 'conditioned response' and is something that is well understood by psychologists when they

Functional Myoclonus



think about habits in the brain. If you try to challenge those thoughts then perhaps it can alter your jerks

3. **Medication** -is often disappointing in functional myoclonus. Most patients have tried medicines like Clonazepam without success

4. **Hypnosis** - Sometimes under hypnosis, jumps and jerks may improve and you may be able to learn self hypnosis to practice at home

Unfortunately many patients with functional myoclonus find that it is a problem which persists. But it's certainly worth trying to improve it. Even knowing what it is can give people valuable peace of mind.

FACTSHEET